THE

MANUFACTURING CONFECTIONER

Pioneer Specialized Publication for Confectionery Manufacturers

PLANT MANAGEMENT, PRODUCTION METHODS, MATERIALS, EQUIPMENT, PURCHASING, SALES, MERCHANDISING

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Publisher and Business Manager-PRUDENCE W. ALLURED

Editor-F. L. SPANGLER

Eastern Advertising Manager—EUGENE C. PILCHER Founder—E. R. ALLURED

English Rep.—L. M. WEYBRIDGE 36 Victoria St., London, S. W. 1



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M. C. POSTSCRIPTS

- ★ In certain sections of the country, it has not been possible in recent years to arouse enough enthusiasm in Sweetest Day to make efforts seem worth while. However, the experience of other cities (notably Cleveland, as reported in this issue) indicates that organized effort, intelligently applied, will put the idea across.
- ★ Lighting is an old subject. Yet, notwithstanding all that has been written and spoken about proper lighting, its need and how to obtain it, how often do we see factories and offices that are murky and dismal? Some paint and properly located fixtures equipped with light bulbs of correct intensities would entirely change the atmosphere to one of cheer and brightness, attained without conditions producing eye fatigue. Read the Mars story in this issue.
- ★ Death takes Paul F. Beich and Howard H. Fiske, two old-timers, respected and beloved throughout the industry. Their reward after death is well earned, however rich and glorious.
- ★ Johnson and Hieronymus give an intelligent discussion on how to cut steam costs and improve the operation of steam - consuming equipment. Superintendents, engineers and maintenance men should not miss this article, which appears as the first one in this issue.
- ★ Robert Whymper submits another article on "New Hope for Chocolate Fat-Bloomers." Note to indexers: This does not belong under the heading "Clothes Fashions in the Early 'Nineties."
- ★ There's a lot of meat in Mr. Wright's article on Selected Selling and Management. How many managements know their businesses well enough that they can answer the questions raised by Mr. Wright?
- ★ Foil wraps are becoming popular for packaged candies. Mr. Field gives an intelligent discussion of these and other papers that should be helpful to the designer and box-maker.

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POLICY: THE MANUFACTURING CONFECTIONER is essentially a manufacturers' publication and therefore is a logical advertising medium only for confectioners' supplies and equipment. The advertising pages of THE MANUFACTURING CONFECTIONER are open only for messages regarding reputable products or propositions of which the manufacturers of confectionery and chocolate are logical buyers.

This policy EXCLUDES advertising directed to the distributors of confectionery, the soda fountain and ice cream trade. The advertisements in The Manufacturing Confectioner are presented herewith with our recommendation. The machinery equipment and supplies advertised in this magazine, to the best of our knowledge, possess merit worthy of your careful consideration.

TO PUT YOUR SALES STORY BEFORE THE CANDY BUYERS

OF AMERICA FOR THE COMING YEAR IN THE

DIRECTORY OF THE CANDY INDUSTRY

MR. CANDY MANUFACTURER: Now is the time! Don't make the mistake of ignoring the requests of hundreds of substantial candy buyers. They ask you to place before them for ready reference in this convenient Annual Directory a summary of the lines you manufacture.

The candy buyers of the nation want your catalog briefly outlined in this consolidated catalog of the American confectionery manufacturers. The 1937-1938 Sixth Annual Edition closes in September.

Hold the business you have and get more! Here is the biggest good-will builder and business getter you can invest in! We possess recent letters and hundreds of request blanks returned from users of the last edition asking for the 1938 Directory. We can show you that the biggest buyers of the industry use this Directory frequently. Believe it or not—some chain organizations have asked for extra copies! Jobbers, too, are wholeheartedly enthusiastic for it!

Your advertising message in just this one edition will keep your story before these buyers a year! No other advertising compares with it in value or low cost.

Act now! Write for further information.

THE CONFECTIONERY BUYER

PUBLISHERS OF THE MANUFACTURING CONFECTIONER

400 West Madison Street, CHICAGO - - - 300

- 300 Madison Avenue, NEW YORK

AMADEO OBICI
Planters Nut & Chocolate Company.



JAMES M. LONG Oswego Candy Works, Oswego, N. Y.



R. LAWTON HENDERSON Norris, Inc., Atlanta, Ga.

WHO'S WHO IN THE CANDY INDUSTRY

Fostering the Idea of Getting Better Acquainted with Prominent Members of the Industry

AMADEO OBICI

MADEO OBICI, for 31 years with the Planters Nut & Chocolate Co., Suffolk, Va., holds the position of President and General Manager with that company. Long ago he realized the possibilities of the peanut and its products. In 1892 he started in business for himself with a capital of \$50, selling fruit and peanuts at a peanut stand. With M. Peruzzi, he organized the Planters Company in 1906 in Wilkes-Barre, Pa.

Mr. Obici is active in various civic organizations, having served as president of the Rotary Club and of the Chamber of Commerce and holding membership in other clubs, including the Elks, Masons and Shrine, Christopher Columbus and Sons of Italy. The Red Cross, Salvation Army and other worthy charity organizations have had his support. He is married.

Mr. Obici attended the public schools in Italy and after arriving in this country he attended night schools and added further to his education by concentrated reading. His reading is confined chiefly to newspapers, magazines and trade publications. His favorite dish is ravioli, and his hobbies are taking care of his modern dairy, and boating. He manages occasionally to get off to Europe for a vacation.

JAMES M. LONG

JAMES M. LONG, President of Oswego Candy Works, Oswego, N. Y., is successfully carrying on the candy business begun by his father, D. D. Long, in 1898. Mr. Long has been with the Oswego firm for 27 years and has held the positions of superintendent and later general manager. At the present time two brothers and a brother-in-law are active in the business.

James M. Long was born in Oswego, N. Y., August 20, 1889, and was educated in the local schools, high school and Syracuse University. He is married and has two children, a daughter, 18, and a son, 10.

The Oswego Candy Works has been a member of the National Confectioners' Association since 1910 and Mr. Long has been active on its committees. He believes that the greatest need in the candy industry is closer cooperation among its members to the end

that their common problems are solved satisfactorily.

Active in civic enterprises, Mr. Long was vice-president for a number of years of the Oswego Chamber of Commerce and holds membership in the Oswego Country Club, Rotary Club, Benevolent Protective Order of Elks and Mad River Club. Interested in charities, Mr. Long is now a trustee of the Oswego Orphan Asylum.

Golf, fishing and hunting are his hobbies and in these varied interests he finds just the relaxation which he needs. In his college days Mr. Long played football and this sport is still his favorite.

Although he reads newspapers, magazines and trade publications, his reading is not chiefly confined to these. He enjoys books on history and psychology. He spends his winter vacations in Florida.

R. LAWTON HENDERSON

RLAWTON HENDERSON, Vice-President in Charge of Sales, of Norris, Incorporated, Atlanta, Ga., is one of the youngest executives in the candy business. He was born 32 years ago in Carrollton, Ga., the exact date being September 20, 1905. He was educated at Draughton's Business College and Georgia Tech Evening School of Commerce in Atlanta.

Having a flair for candy that was evident in his early days, Mr. Henderson entered the employ of Norris, Incorporated. That was 14 years ago, and he has been with the company ever since, having served as purchasing agent before his election as vice-president.

He is also a member of the Board of Directors of the National Confectioners' Association, and holds membership in the Atlanta Athletic Club and Palestine Lodge No. 486. He is also interested in local charity work and civic enterprises. He is not married.

Newspapers, magazines and trade publications comprise his chief reading matter, but he also revels in detective-story books. He enjoys playing golf. eating ice cream and spending his vacations on the beach. In the field of sports football is his favorite. He believes that the greatest need of the candy industry is greater cooperation between manufacturers, thereby netting greater profits.

THE

MANUFACTURING CONFECTIONER

PUBLISHED BY THE MANUFACTURING CONFECTIONER PUBLISHING COMPANY



ECONOMIES OF

STEAM TRAPS in the CANDY PLANT

Efficient and prompt removal of air and condensate gives steam-using equipment a chance to function properly

* By EDWARD M. JOHNSON and JOHN W. HIERONYMUS

PHOTOGRAPHS BY ARMSTRONG MACHINE

ONFECTIONERY plants, by and large, have not availed themselves of the savings that can be made by the proper application of devices for eliminating condensate and air from steam-jacketed equipment, steam pipes, etc. Enough operating data have been collected from plants to show without a doubt that the proper trapping of steam-consuming equipment and steam lines results in (1) savings in fuel and steam consumption, (2) speeding up of production, and (3) more uniformity in the quality of the product.

One cannot expect steam-using equipment to operate efficiently and with a minimum of trouble unless operating conditions are such that at all times steam at proper temperature is maintained in contact with the heating surfaces. In actual operation of such equipment, one is confronted with the presence of condensate or air, maybe both, and unless these are eliminated the cooking or heating operation is slowed up. But in eliminating condensate and air, many plants are using methods that increase steam waste and fuel consumption.

If the temperature of the steam in the kettle jacket, steam coil, or other apparatus, is to be held at a point near the temperature of the steam in the header, it

is important that no air be present in appreciable quantities, and that the pressure drop between the header and the point of consumption be reasonably low, since the temperature of pure, saturated steam depends directly on its pressure and is not affected by other factors such as amount of condensation present, rate of steam consumption, etc., except as

When steam is wasted, it cuts into profits. Moreover, steamconsuming equipment can function properly only when steam lines and steam jackets are kept clear of air and water. Steam traps play an important part in conserving steam and allowing cooking kettles and other equipment to function as they should. This article explains why. In other articles to follow for the maintenance man, engineer and management, tips will be given on how to reduce fuel costs, maintenance charges, and make economies in other ways. What are your steam and fuel problems? Whether they pertain to pipelines, valves, traps, cooking equipment, furnace problems, oil burners—or whatever they are

-send them in to us. We'll try to help you.-Editor.

such factors might have a bearing on the steam pres-

The accompanying chart shows how the temperature of saturated steam increases with the pressure. At 100 lb. gauge pressure, the temperature is 337.9° F., as compared with 212° F. at atmospheric pressure (0 lb. gauge).

Hence, with proper piping and equipment to maintain a high steam pressure at point of use, together with means for eliminating condensate and air, the steam temperature will necessarily be high, and ideal heat-transfer conditions will be maintained.

Traps are not panaceas for all steam-heating ills. If piping of too small diameter, or obstructions in the steam line, produce an excessive drop in pressure, one would not expect to correct the condition merely by installing traps. All piping must be kept clear to allow the unobstructed flow of steam, and undersized pipe should be torn out and replaced with piping of proper size.

Saves Fuel

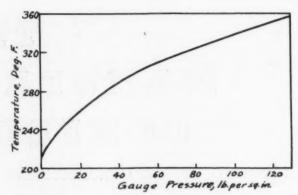
An examination of certain operating data available from confectionery plants shows savings in fuel consumption of 20 per cent to 50 per cent made by the careful selection and installation of traps, with their attendant economies including reduced steam demand, more uniform load distribution by reducing starting peaks, etc. These figures are not exaggerated, but we believe that they are typical of economies that confectionery plants, taken by and large, can make, whether the fuel be oil, gas or coal.

Saves Steam

The heat-delivering capacity of such steam-consuming equipment as cookers and hot slabs can be maintained only by proper trapping of steam and elimination of air, except that where live steam is mixed with water for heating purposes, such as in the case of chocolate-melting kettles, there is no problem of condensate removal at the kettle.

When saturated steam gives up heat, some of it changes back into water (condensate). In steam mains and pipes and in all equipment using saturated steam, condensate is formed. This condensate must be discharged so that live steam can continue to flow along the pipes and can fill all steam spaces in the kettle jacket, steam coil, hot slab, or wherever the steam is to be used.

Condensate can be removed by opening a valve placed in whatever place the condensate collects, thereby allowing the condensate to be blown out to the atmosphere or return line. The valve may be manually operated and adjusted, or its operation may be automatic, such as in a steam trap. Most any type of trap in good mechanical condition will discharge water automatically without exhausting live steam. Traps of many different types and sizes are available to fit different services, capacities and other re-



Illustrating Drop in Temperature of Saturated Steam as Pressure Is Reduced.

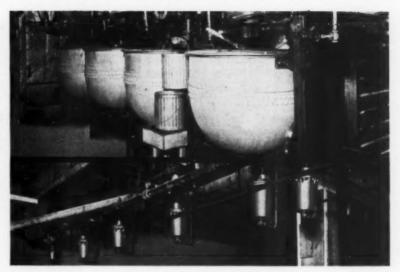
quirements, and the selection of the proper trap is quite important to insure correct performance and highest economy. A trap that will give best service on a steam radiator will not do for a cooking kettle, because of the difference in the requirements of the two services. As another illustration, fast cooking requires a larger trap than where the batch is cooked slowly.

As to the relative merits of the steam trap and the hand-regulated valve for discharging condensate, this matter was recently investigated by the Armstrong Machine Works, Three Rivers, Mich., who obtained performance data on steam consumption and condensate removal from jacketed cooking kettles, these consisting of copper kettles of 15-gallon and 50-gallon capacity, and a 100-gallon aluminum kettle. In the tests, the kettles were supplied with steam at pressures ranging from 10 to 90 lb. per sq. in. It was found that with traps properly selected to handle both the air and the condensate, there was a saving in both steam consumption and cooking time compared with the results obtained with cracked valves and unrestricted vents. A summary of the tests obtained with the 100-gallon kettle is given in the table. The



Each one of these crystallizers in the plant of the Nutrine Candy Co., Chicago, is drained with a trap located under the floor. This installation is saving as much as 14% cooking time per batch. Proper trapping of steam-consuming equipment has reduced the steam load to the place where only one boiler is now needed. Before the present trap installation was made, two boilers, both operating at capacity, were required to handle the same steam demand.

These gum cookers in the Chicago plant of the Nutrine Candy Company are individually trapped, the traps being located under the floor. The present trap installation has reduced the back pressure in the return lines from an average of 18 lb. to 3 lb. pressure limit. Cooking time has been reduced from 10% to 20%, depending on the process. Thus, increased production has been made possible without having to add to the steam-generating plant or the cooking equipment.



results of these tests, employing both copper and aluminum kettles, have been verified by other tests made in plants under actual production conditions.

The value of steam as a heating agent lies in its latent heat of evaporation. When saturated steam is condensed, it gives up its latent heat. A pound of saturated steam at atmospheric pressure will give up 971.4 B.t.u. (heat units) when it condenses to water, though throughout the operation of condensing, the mixture of steam and water does not drop in temperature. Almost all the fuel that is used to generate steam goes into the process of evaporating the water and very little of it is used to heat the water to boiling temperature. Using 12,000-B.t.u. coal (any fuel can be used as an example), with a furnace efficiency of 70 per cent, we will require less than 2 lb. of coal to raise the temperature of 100 lb. of water from 60° F. to the boiling point (212° F.), but $11\frac{1}{2}$ lb. additional will be needed to evaporate the water into steam at the same temperature. So a pound of steam is about six times more expensive than a pound of water at boiling point. As we get to higher pressures, the difference between the heat required for evaporating water and that needed to bring the water to the boiling point is not so great. Yet, steam waste can result in an enormous fuel waste, and a small leak can eat a big hole into the coal pile or oil storage. For example, steam at 100-lb. gauge pressure escaping continuously through a 1/4-in. orifice will in the course of a year add \$1,260 to the fuel bill, if we assume that steam costs 50c per 1,000 lb., which is about the average cost in confectionery plants.

Where the steam trap prevents the escape of live steam, the cracked valve often wastes it. Where a cracked valve is used for condensate and air removal, it is impossible for the operator accurately to adjust the valve for all conditions, so he must set it to handle the heavy surge of condensate that occurs at the beginning of the cooking. After this surge is passed the setting is far in excess of that required, with the result that considerable steam is exhausted through the vent.

Speeds Up Production

The results of the laboratory and factory tests on cooking kettles showed that the use of traps for condensate and air removal in place of cracked valves or unrestricted vents did not slow up the heating process, but in some cases actually reduced the heating time, as in the case of the 100-gallon kettle already referred to, whose test results are given in the table.

In these tests, the traps were selected with particular care as to capacity and their ability to handle air. If undersized traps are used, or means are lacking for handling air, the cooking might be slower compared with results obtained by drainage through a cracked valve. However, if the trap has adequate capacity for handling condensate and air, the kettle performance was found to be much better in every respect than when the kettle was drained by one of the blow-through methods.

Failure to remove condensate from steam-heated units causes a very rapid falling off in the heat delivering capacity. When water fills steam space, it is equivalent to cutting down the size of the unit—a costly practice where machines are purchased for their heating capacity. Condensate also acts as an insulator, preventing the rapid transfer of heat from the steam to the surfaces to be heated.

Likewise, the removal of air is important, if high heat transfer is to be maintained. It has already been stated that the rate of heat transfer depends on the temperature of the steam. If the steam pressure and temperature falls off, the rate of heating is reduced. The presence of air also results in a lowering of the steam temperature. That is one reason why the re-

Summary of Tests on 100 Gallon Aluminum Kettle.

Summury of resis on to	o cranon	Aluminum	Ketue.
	Trap With	Restricted	VED BY— Unrestricted Blow Thru %" Pipe
Minutes required to heat 417 lb. water from 43° F. to 212° F	6.9	7.7	8.6
heat 417 lb. water from 43° F. to 212° F	85	90	105
Pounds of steam used per lb. of water evaporated	1.24	1.33	1.64
Pounds of water evaporated per minute	8.4	7.6	6.4

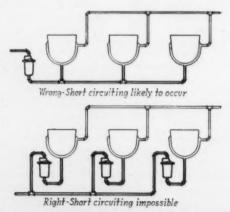
Though traps result in less steam consumption, one must not conclude that the difference in the figures above represents total waste. It is generally found that the inefficiency of the two blow-through methods of condensate removal results in a higher discharge temperature which might increase slightly the hot-well temperature, thereby in turn requiring less fuel consumption at the boiler. The saving thus made in fuel is more apparent than real, and actually is not nearly as much as that attained by proper trapping.

moval of air is important. Taking saturated steam at a gauge pressure of 100 lb. per sq. in., we find that if 10 per cent of air by volume is mixed with the steam, the steam temperature is lowered 8° F. With 20 per cent air present, the temperature is 16° lower, and if the steam contains 30 per cent air the temperature is almost 26° lower than if no air were present. It has been demonstrated that under extreme conditions the presence of ½ of 1 per cent by volume of air mixed with steam will reduce the heat-transfer efficiency as much as 50 per cent.

The removal of condensate is simple compared with the problem of eliminating air. When steam is turned into a jacketed kettle, and begins to condense, the condensate flows to the bottom of the jacket space and is easily trapped out, but something must be done about the air that was in the kettle at the beginning. This air tends to mix with the steam and is apt to collect in pockets. If, on the other hand, means are provided for the prompt handling of the total volume of entrained air, there will be no difficulties caused by air pockets obstructing the flow of steam.

It is also important, when considering the problem of how to obtain maximum heat transfer, that when two or more units are to be drained, each unit be supplied with its individual trap instead of only one trap being used to drain the entire group. In the case of only one trap in a common return from several steam-consuming machines, it often happens that one or more of the units will short-circuit and become filled with condensate or air.

Assume a battery of three jacketed kettles (see sketch), two of which are filled with hot liquid and the third has just been filled with a cold liquid. The kettle filled with cold material will use far more steam than the other two and consequently the pressure in the kettle will be considerably lower. As a result, steam will flow into the kettle from the common return line and prevent the escape of either condensate or A check valve installed in the drain line from each kettle will prevent the back flow from the return line, and will allow the condensate to drain off as soon as enough collects to create a static head sufficient to open the check valve; but the air-removal problem still would not be solved. Air will not be able to leave the kettle until the kettle pressure has been brought up to the pressure in the other two kettles and during this period the batch will not receive as much heat as it should, since air fills a consider-



Even Though the Steam-Consuming Units Be Similar, Each Should Have Its Individual Trap to Insure Proper Condensate and Air Removal.



A typical installation of a steam trap installed on a copper cooking kettle in a candy plant for automatically discharging condensate and air from the steam jacket of the kettle.

able portion of the jacket space. The installation of traps in the return from each kettle will allow proper removal of both condensate and air, and no kettle will have its performance adversely affected by any of the others.

Necessary for Uniform Product

It is difficult, if not impossible, to maintain uniformity in the product if steam pressures and temperatures fluctuate widely during the cooking or heating operation, or if, because of undersize steam leads or failure to take care of condensate and air, the cooking time is not uniform but varies for batches of the same character.

Steam lines of ample size should be used to prevent excessive pressure drops, and return lines should be sized to prevent excessive back pressures. In addition, proper trapping will solve the problem of condensate and air removal. In recent years a careful study has been made of the process of steam cooking, and traps have been especially designed for use on steam kettles where the time element is an important factor in cooking.

The use of traps is not confined to kettles, but they should be used with hot slabs, steam coils, at drainage points in pipe lines, and wherever steam is used or condensate collects. Dead pipe ends, unused pipe lengths, unnecessarily long pipe lines, all increase the use of steam and the amount of condensation that must be removed. The elimination of unnecessary pipe and the simplification of piping layouts will reduce the number of traps required and allow in some cases the use of smaller traps.

New Hope for . . . CHOCOLATE FAT-BLOOMERS

* By ROBERT WHYMPER

PART II

N a recent issue of the Journal of the Society of Chemical Industry (June, 1937, LVI, 196T-199T) there duly appeared, as promised, Part I of "Physico-Chemical Investigation Incidental to the Study of Chocolate Fat Bloom," by William Clayton, Sydney Back, Robert Ian Johnson and James Frederick Morse. Through the courtesy of Dr. Clayton, readers of The Manufacturing Confectioner may expect to get replies to several queries I have raised, and intend further to raise, regarding (a) degree of efficiency, (b) the range of effective temperatures, (c) the method of reaching effectiveness (or the scientific explanation) of blown cacao butter in preventing chocolate fat-bloom. Such queries are not being raised by me because of any doubt in my mind about Dr. Clayton's statements, but because there is a great difference between theory and practice on the one hand, and between practice in England, with its moderate climate, and in America, with its huge extremes of temperature and humidity, on the other. Meanwhile, the paper mentioned above is of absorbing interest.

Under What Conditions?

(a) Some questions of practical importance must arise, however, such as under what conditions does blown cacao butter inhibit fat-bloom? And here, unfortunately, the above paper is of no help to us. I have repeatedly written, when discussing chocolate fat-bloom, that every possible factor that might influence the condition ultimately observed must be provided, if an intelligent criticism (from theoretical and practical standpoints) is to be given. Nor is this just an attempt on my part to evade the issue, because primarily I am interested in the solution of the problem. and, after many years of study of this condition, I can myself prevent, increase, retard or accelerate fatbloom by manipulation of one or more of the following factors: fat-content and amounts of other components of the chocolate, degree of tempering the chocolate before being used as a coating, temperature of coating, temperature of cooling, speed of cooling, temperature of storage, range of fluctuating temperatures during storage, and the centres over which the choco-late is placed. Taking the illustrations, shown in his paper, of comparative blooming chocolates, no mention of the storage temperature (whether it was high, low or fluctuating) was given; no mention made of how soon after coating the chocolates were put into storage; nor how the chocolate used for the coatings was prepared or manipulated, tempered or cooled. In other words, here we have two samples of chocolate-coated goods about which the only three things we outsiders know are that one was coated with chocolate containing 0.5% of blown cacao butter, and the other without such addition, that both were photographed after two years of storage, and that blown cacao butter does not give complete immunity to chocolate covering nutcentres. Presumption is, from other references in the paper, that the composition of the chocolate-coating was "Fat (total) 36%, sugar 45%, cacao particles 19%."

Full Details Must Be Provided

Now at any given time, two batches of chocolatecovered goods may be manufactured from the same chocolate, that under the same storage conditions will show just as marked differences as those shown in the illustrations by the smallest change being made in what I have chosen to call, in the past, "Chocolate Tech-By the simplest change in enrober-conditions, two such contrasting batches can be obtained from the same chocolate within ten minutes of a continuous run. Therefore, until all of the details of manipulation are known, photographs of samples, even when said to be under identical conditions, mean absolutely nothing. It is only right to state at this point that in a personal letter to me Dr. Clayton wrote, "The reproduction of the photographs has unfortunately not been as successful as the original submitted, and the two contrasting pictures on page 4 of the reprint in reality contrast to a very remarkable degree." But even supposing a still greater contrast in fact than the illustrations shown, one must know further what type of fat-bloom developed in each case. The existing illustrations, with all their defects, show the "whiteness" of chocolate due to the most drastic conditions of storage on at least one of the samples, a form of bloom that is due, not only to separation and crystallization of the highermelting fractions of the fat, but to a physical separation also of the faintly yellow fat to the top, and the more heavy particles of sugar, etc., to the lower sections of the chocolate-coating during a prolonged state of liquefaction; and this latter separation is something quite different from ordinary chocolate fat-bloom which is, indeed, like the bloom on grapes. As stated in my previous article on Dr. Clayton's product (The MANU-FACTURING CONFECTIONER, May, 1937), cow's butter-fat (free from water) is very effective in similar cases, provided, of course, I am correct in assuming the "whiteness" shown in the illustrations (and on the actual chocolates) to be due to that particular form of excessive bloom, though such a fact has no bearing whatever on the accuracy of Dr. Clayton's contention. except to illustrate that the prevention of separation and crystallization of the higher-melting fractions of cacao butter that cause bloom has already been attempted with some success.

Is Complete Inhibition Secured?

Another question regarding effectiveness must arise since blown cacao butter is not equally efficient in preventing deposition of all types of the higher-melting fractions present in fats and oils (as shown by Dr. Clayton's figures), and that question is,—what per-

centage of those fractions in cacao butter that are responsible for bloom are inhibited by the presence of blown cacao butter? The answer to this question obviously determines both the interpretation of Dr. Clayton's word "marked" when speaking of the inhibiting action of his product, and the degree by which bloom can be reduced under all of the required conditions of manufacturers and storekeepers by the addition of blown cacao butter. Inference from the paper is that blown cacao butter will give complete immunity, since an apparent exception in the case of chocolate covering nut-centers is mentioned: "Even the best blown cacao butter does not give complete immunity from the defect, although it greatly reduces its incidence," an inference that, belying the use of the word "marked" elsewhere and the showings of the photographs, is probably quibbling on my part. Effectiveness, therefore, of Dr. Clayton's product must be demonstrated to doubting Thomases by something more than imperfect photographs, and we must know all of the conditions on which he has based his assertion that "oxidized cacao butter possesses marked capacity to inhibit fatbloom in chocolate. . . .

What Is the Effective Temperature-range?

(b) After the previous paragraphs, it is hardly necessary to emphasize that any query regarding the range of effective temperatures during storage is a mere sub-section of (a). Between what ranges of temperature during the two years of storage did the chocolates lie in their boxes? If the temperature was low (such as that used by Dr. Clayton for his olive oil, i.e., 2-4°C.) and not fluctuating by more than some two to four degrees Centigrade, then, clearly his samples of chocolate were badly made at the outset, one being only slightly better than the other, since any well-made chocolate will stand such low and slightly fluctuating temperatures as those mentioned, almost indefinitely, without appreciable appearance of bloom. But obviously such temperatures (low and non-fluctuating) were not employed for his storage; otherwise an expert Dr. Clayton could not have obtained the "whiteness" apparent on the photographs of his samples. At some time or other, an appreciable proportion of the cacao butter present in this chocolate must have been in the molten state, and, by such a statement, I must admit, to a temperature above, say, 25° C. (almost certainly higher) for a more or less prolonged period, continuous or fluctuating.

In this connection, it must not be forgotten by the practical man that fat-bloom on a normal and well-made chocolate does not, cannot, appear in an offensive form under two conditions: (1) when the chocolate is completely solid (i.e. when the normally most liquid portions of the cacao butter are also completely solid at some very low temperature around 5° C.); (2) when the chocolate is completely liquid (i.e. when the highest-melting fractions of the fat are also completely liquid at some very high temperature around 75° C.); and large fluctuations of temperature affecting these states are obviously not permissible in these instances. At any point between these two limits, some bloom will occur on normal, untreated chocolates, the more so when the chocolate is improperly tempered, cooled and stored, the less so when properly tempered, cooled and stored.

(c) The crux of the problem lies in the question of what is the method of reaching effectiveness of blown cacao butter in preventing chocolate fat-bloom. On this point Dr. Clayton has not only a very sensible and highly scientific angle, but he is following a principle that may well solve the whole problem, as it should

do, if it is scientific in the highest sense. So long as Dr. Clayton will keep to "grayness" and not, as I fear, be often referring to "whiteness" as "bloom," I am convinced that he and his collaborators are working along right lines.

Only Two Methods of Preventing Bloom

Assuming, as Dr. Clayton graciously acknowledges, that chocolate fat-bloom is the separation and crystallization of the higher-melting fractions of cacao butter from a chocolate containing them, there are only two Socratic methods of preventing bloom: (1) by separation and crystallization of all possible fractions that cause the trouble before the chocolate is used as coating, and (2) by finding ways and means of preventing the separation and crystallization of the troublesome fractions after the chocolate is used as coating. Owing to the admitted conventions in the using of chocolate, most people, including myself, have considered the first method as the most obvious; the second, by no means neglected, probably necessitates an addition of something to chocolate that either is contrary to Pure Food and Drugs Acts or inclined to impair the flavor of a product that, after all, should be made as pleasant as possible. Oxidized cacao butter, in the quantities stated to be necessary, does not appear to contravene any Act or any ethics of the gourmet. And, for this reason, if Dr. Clayton can satisfy the chocolate world of the efficiency of his product, the whole problem will be solved.

Ineffective for Nut-bloom

The last paragraph of his paper is particularly illuminating, because natural and blown oils, other than cacao butter, have not as yet been found by him to be effective in preventing bloom, and it is not without interest that I have, myself, used blown soya oil and got little or no improvement. Nut-bloom has also not yet yielded to Dr. Clayton's product for, I think, reasons that cannot be adequately explained away by the suggestion that "the expected influence of blown cacao butter suffers interference because of a preferential adsorption at the fat crystal-fat interface by the nut oils." But this is a matter that cannot be discussed in detail here, and, for such a subject, a mere bite at the cherry will not reveal the complete pit.

Let me conclude with an attempt to explain in the least scientific language possible why I believe that Dr. Clayton has found the answer to the problem of chocolate fat-bloom, even if I do not believe that he can yet stop bloom through all the wide-ranging conditions that afflict present chocolate manufacturers and storekeepers. The colloid expert will, I feel sure, forgive lapses from absolute truth in such an effort.

Some Facts

The following are a few known facts, without reference to their authority for the sake of brevity:

(1) A molten or liquid fat—molten cacao butter, or a liquid oil—are normally transparent due to the constituent parts being in such a minute state of existence and in solution that they offer no great resistance to transmitted light. Such liquids need not be in a molecular state, but are, at least, in a minute particular form, smaller than when the liquid is cloudy due to deposition of "stearine" or to solidification. Being a mixture, molten cacao butter is, in any case, a true solution of high-melting fractions in the more liquid oils.

(2) A fat or oil that is beginning to cloud or solidify consists of a liquid portion and a solidifying portion; the latter, on reaching a sufficiently high degree of

• The accompanying photographs are intended to illustrate the different types of chocolate fat-bloom commonly found in America. The difficulty of taking photographs of this type must be common knowledge to anyone who has tried to reproduce them accurately, which is largely a mat-ter of illumination. Thanks to the courtesy of Messrs. Ross & Rowe, 75 Varick Street, New York City. we are able to present what, to us, are the best examples of the points we wish to emphasize in this article. Retouched photographs are of no scientific value; on the other hand, an actual photographic reproduction of fatbloom of the grape-bloom type is almost impossible to obtain if the bright illumination necessary for the photograph is used, since the heat evolved by the bulbs melts this powdery growth of fat before a photograph can be obtained. The photograph on the next page of the grape-type of chocolate fatbloom has, therefore, been retouched to simulate accurately this form of fat-bloom, so well known to manufacturers and storekeepers. The two photographs on this page are untouched except where the cracking of the chocolate itself necessitated some pointing.



(Above) A remarkable photograph showing an acute form of sugarbloom on the left side of the box, and typical "whitening" due to drastic heat-conditions such as are experienced in the summer months.



A typical example of "graying" due to abnormally high temperatures. In taking this photograph a large proportion of the worst "graying" was melted due to the high temperature of the light bulbs.



A retouched photograph showing as accurately as possible the grape-bloom type of chocolate fat-bloom as it appeared on the original chocolates.

solidification, comprises nuclei, or aggregates of molecules, that are opalescent or even opaque. It is these nuclei that, on growing to crystals of appreciable size, cause bloom to appear.

(3) In the realm of colloid chemistry (and here some chemists will not agree) the particle size, ranging from molecules to aggregates of certain minute dimensions, determines whether or not the substance may be said to be in the colloidal state. Clayton and his coworkers refer to McBain and Laing McBain, and their "spontaneous stable formation of colloids from crystals and from true solutions through the presence of a protective colloid." The protective colloid is a product such that its action may prevent increase of the size of particles beyond the colloidal state.

(4) By certain drastic physical treatment, many substances (for example, rapidly solidified cacao butter, transparent hard-boiled sugar-candy) may be caught in a physical state that is known as "unstable," since, with age (and more or less rapidly according to temperature, humidity and other variable natural conditions) they change into something that does not change further, i. e. into a "stable" state which is often markedly crystalline. The stable state of cacao butter, rapidly cooled by dropping it on ice, is not reached at temperatures around 25-30° C. until some three weeks have lapsed, when its final and complete fusion-point is higher and the particle size of its crystals considerably greater. For this latter reason, I want to know what the period of standing of his cacao butter was before Dr. Clayton could state—"Blown cacao butter slightly depresses the complete fusion point of cacao butter." The further statement that "its presence has a marked effect during solidification, which takes place uniformly and without the usual formation of clumps of crystals" is of far-reaching importance in this matter of fat-bloom, as we shall see later, though lecithin manufacturers also have claimed a similar phenomenon in the use of their product, with which I partially agree and which is somewhat contrary to Dr. Clayton's "hydrophilic and hydrophobic theory.

(5) In olive oil, Dr. Clayton has proved that cloudiness or deposition of "stearin" is prevented by the presence of about one per cent of blown cacao butter. This fact is undoubtedly better explained by McBain's theory above that Dr. Clayton quotes as demanding "a spontaneous orientation of the molecules, with the soluble groups exposed to the solvent, such that the particle is self-organizing and if disturbed would revert again to this equilibrium form," than by the theory that, in the case of olive oil, the blown cacao butter may act as a "peptising agent to separate already exist-ing particles," apparently put forward by Bancroft.

(6) Blown cacao butter is adsorbed at the hydrophobic surface, and lecithin at the hydrophilic surface of the different particles present in chocolate; i.e. blown cacao butter at the cacao particle-surface, and lecithin at the surface of the sugar and milk particles.

Dr. Clayton's Intention

Let us consider for a moment what Dr. Clayton is driving at, while not saddling him with the responsibility for a popular explanation such as must be given here. Dr. Clayton's attitude toward the problem is to find something that will prevent the nuclei or aggregates of the higher-melting fractions of cacao butter, set in the normal way in the manufacture of chocolate, from growing further, and he has recommended the addition of a small quantity of blown cacao butter. Blown cacao butter, he finds by a series of admirable experiments, is adsorbed mainly "at the cacao particlefat interface, and lecithin at the sugar-fat and milk powder-fat interfaces in chocolate." This fact is of prime importance, for it explains, firstly, why lecithin (adsorbed at the hydrophilic surface) is so little effective and blown cacao butter so superior in preventing "grayness," and, secondly, why lecithin is far su-(Turn to page 48)

SELECTED SALES EFFORT

Essential in Modern Profitable Management

*By R. P. WRIGHT

Marketing, Management, and Merchandising Counselor

THE far sighted executives who carry the responsibility of marketing and merchandising the nation's candy production are recognizing the vital necessity for a scientific, yet practical application of selected sales effort. Some of the leading manufacturers of this industry are making outstanding progress in this direction.

The many and complicated factors that are combined in the function of distributing candy to our modern markets have rendered obsolete the "old hit or miss" sales practices. However, the complex ramifications of modern merchandising methods have been entirely overlooked or passed up by many concerns who try to explain their lack of progress by saying, "Such sales procedure may apply to other products but you can't find any new ways to sell candy."

The marketing (distribution) and merchandising (selling) of candy today faces greater resistance and much keener competition for the consumer's nickel, quarter, and dollar than ever before. All industry is fighting bitterly (and sometimes we may think unfairly) for the various fractions of the consumer's dollar that run into such great volume in the national aggregate. Yet the average "candy man" is content to carry on along the same old general lines that were satisfactory in the days that are now gone forever.

Four Selective Selling Elements

Management that proposes to operate on a sound and practical basis must build its sales operation on the four following basic selective selling elements:

(First) A Selected Product for (Second) Selected Markets

(Third) Selected Sales Efforts

using (Fourth) Selected Merchandising Methods

At this point I hear the widely known "welkin" (whatever that may be) ring with prolonged boos—and the deflating Bronx cheer as one man says: "Our sales are greater than ever before." Another, "Why, we have national distribution." Another, "Our plant is oversold"; "Our Candy has national appeal," and so on ad infinitum.

Very fortunately for our peace of mind, there is also heard above the smug chorus of the self-satisfied, a cold hard voice that says: "What do ya mean? What are all these selective selling elements that you talk about? How do you select them, and why are they so important?"

It's a cold voice, coming from a hard headed individual down here in the front row who cocks a wary eye and again says in effect, "Brother, if you have something, give it—if not—."

Therefore, we hasten to reply as follows to the

★ Some of the searching questions asked by Mr. Wright in this article may reveal startling results when answered by the manufacturers who are not operating on the basis of sales and profit analyses. For example:

How many items in your line are actually profitable? Do you know which they are? Do you know why? What is the share of profit that such items have earned? How much of their profit earning was planned, and how much resulted from the general business improvement or recovery?

Do you know which markets produce a profit earning? In what markets did your sales cost penalize your general operation cost? How much money are you actually spending to maintain that great idol and juggernaut—national distribution—and why?

If your plant is over-sold, why is it over-sold? Is it because of profitable merchandising efforts, or did you build this volume with practically profitless sales because "volume reduces overhead"?

worthy brother who boasts of his increased sales: "You'say your sales are greater than ever before—how about profits?" Back he comes: "We had one of the best years our company ever had." And he settles down, hoping to enjoy our extreme discomfort.

This same answer was probably given by the builders of the ancient pyramids and King Solomon's Temple to their overseers, yet it does not require the wisdom of a Solomon to completely deflate such a reply with a few pointed questions.

Sales and Profit Analyses Essential in Modern Management

How many items in your line were actually profitable? Do you know which they were? Do you know WHY? What was the share of profit that such items earned?

How much of this "profit" earning was planned, and how much resulted from the general business improvement or recovery?

Turning to the gentleman with "national distribution," we further ask him: Do you know which markets produced a profit earning? In what markets did your sales cost penalize your general operation cost? How much money are you actually spending to maintain that great idol and juggernaut—"national distribution" and WHY?

The gentleman whose "plant is over-sold" still feels smugly complacent—but let him answer this: WHY is your plant over-sold? Is it because of profitable merchandising efforts or—did you build this volume with practically profitless sales because "volume re-

duces overhead"?

Too often there comes a time after a low or "no profit," sales volume has absorbed plant capacity that it becomes necessary to decline profitable orders because the factory capacity is taken up with the forementioned "volume." Needless to say, such a condition is unsound and is absolutely unnecessary.

Selected Product

Let us consider briefly the four factors of Selective Selling.

First, what constitutes a selected product? To the candy field it means the selection of a product that consumer research and analysis has proved to have a potentially valuable consumer appeal.

There is only one intelligent basic way to determine that factor; that is by recording the analysis of actual

consumer reactions.

All the laboratories and technical engineers in the United States cannot tell as much about the actual use of an egg beater as the little woman who, with three young 'uns and a pup under foot is trying to whip up an omelet for their's and daddy's breakfast.

Merlin and all the Knights of the Round Table could not tell why the timber loggers in one part of the country must have, or will use only axes of certain design, while in another locality to simply show an axe of that design would invite sales disaster.

We all know something of certain local candy preferences in the various sectional and geographic areas, but too many times we don't know the reason for such likes and dislikes. Environment, nationality, heredity, racial characteristics all play a part in the field. Occupations, climate and local industry are other elements that effect this preference. For instance, the farming population in some areas prefers a thick, heavy corn syrup; and in others sorghum, or 'lasses, is the popular sweetenin'. In still other areas thin maple syrup "that soaks in good" is the consumers' choice.

Space and time do not permit even starting to cover the infinite varieties of candy, yet—for instance— there is still a demand for the old red, yellow, pink, white and chocoalte sugar goodies that the general store used to carry in a barrel under a wire cover. Remember how carefully and casually you used to lean on the edge of that barrel while watching the grocer put up the grocery order Ma had sent you for? Sometimes you'd manage to get a piece or two without being caught. Sometimes the storekeeper would say, "Better take a piece or two, Bub." Then again, "Get away from that there barrel, unless you want me to put a nickel's worth o' candy on your Ma's bill!"

If you've never spent any time in the country, you don't remember such a candy, but if you did, probably you still nourish a hankering for such plebian sweets even to this day. By such memories and events are

consumer tastes developed.

Therefore a selected product is one that research and analysis has proved to have a satisfactory consumer acceptance, and that can also be produced economically and sold profitably.

Selected Markets

Selected Markets comprise that of those areas which the basic consumer analysis indicates as having a potential sales profit value. Consumer analysis alone is not sufficient for actual selection of markets, for while consumer acceptance is essential there are many other vital elements that must be carefully considered and analyzed in this relation. Climatic and geographic conditions, transportation cost, distribution facilities, outlets, and the probable cost of market sales coverage are some of the phases that must be studied in relation to the whole problem of Selective Selling.

Selected Sales Effort

Selected Sales Effort is the application by proper personnel of sound marketing and merchandising policies and methods.

Selected Merchandising Methods

Selected Merchandising methods are those which will best distribute the selected product to selected markets through selected sales effort—personnel—and outlets.

Advertising policies and programs are a part of this last factor and advertising will not carry its proper share of merchandising effort unless it is evaluated in direct relation to market and sales coverage.

Again we repeat—scientific, practical research and analysis is second in importance only to management personnel. This work must be carried out by an adequate staff, but that staff must be properly selected and trained under capable supervision, direction, and management.

Management must know how to allocate and apply these expenditures in sound ratio to the other operating expense. Further than that, supervision must not only know how to plan but to direct and carry through the program in its entirety, for successful operation.

Frankly, the greatest problem that most sales managers in the candy industry face today is the short-sightedness of management. Too often management will invest considerable sums in research and development work for manufacture and production but tighten the purse strings on actually essential sales expenditures.

They refuse to recognize the importance of scientifically selected sales effort and treat sales management budgets like the proverbial step child. Unfortunately too many so-called sales managers are partly responsible for this condition, for they are not equipped to Sell their needs to management.

Sales Research and analysis requires ability, talent, character, and training. Application of the findings discovered by such research and analysis requires the rare combination of mind that can appreciate and apply these findings in an executive capacity. Such an executive is able to coordinate the principles of Selective Selling with the fundamental requirements of finance and manufacture in a practical way.

Every cobbler makes a better shoe over his own last—and every candy maker makes better candy from his own kettles; so every organization requires a specialized knowledge of Selective Selling as applied to

its particular problems.

Neither general management, production management, nor financial leadership are ordinarily equipped to properly formulate or direct such a sales program. If your own sales department feels it is not equipped to carry out such a program, call in a recognized firm of marketing and merchandising consultants. Who does it and how it is done is not as important as doing it now, for if you are going to sell candy profitably you will—sooner or later—have to sell selectively.

The best proof of the value of this plan is the success experienced by some of the leading candy manufacturers who are operating on this basis.

LIGHTING

IN THE CANDY MANUFACTURING INDUSTRY

Digest of Report of Committee on Industrial and School Lighting of the Illuminating Engineering Society, Published in the Transactions of the Society, May, 1937

LIGHTING enters as a vital element into the sanitary and operating efficiency of the candymanufacturing industry. Generally speaking, new plants are constructed to utilize the greatest possible amount of daylight, but it is paradoxical that some of these plants so well equipped for daylight manufacturing have very inadequate and inefficient artificial lighting systems.

In the interests of sanitation, not only are candies inspected regularly, but the conditions under which they are manufactured are closely supervised.

Adequate, uniform illumination is important in the interests of safety. It makes it practically unnecessary for the eye continually to readjust itself, enabling the worker to see clearly at all times. It eliminates the possibility of misjudgment of objects and parts that make up the manufactured product, and minimizes the accident hazard of the intricate automatic machinery used, composed of moving parts, sharp knives, or dies.

Seasonal peak production periods must be taken into account in the design of an adequate lighting system.

In the study of candy-manufacturing plants, it was found that lighting which produced a cheery atmosphere also produced a more alert and better attitude among the employes. The routine of many of the operations tends to depress the worker. In gloomy surroundings, when caused by inadequate lighting,

The "foot-candle" is the standard unit of measurement of illumination. One can use a foot-candle meter, a small portable instrument obtainable from various instrument manufacturers, for measuring light intensities in various parts of the factory and comparing the readings with the illumination table given in this article. Another method of checking and making comparisons is to use standard tables giving average foot-candle intensities for different light sources, their spacing, ceiling heights, and other specified conditions. Such tables are found in Safe Practices Pamphlet No. 22 on "Industrial Shop Lighting," published by the National Safety Council, or can be obtained from manufacturers of lighting units.—Editor.

indifference on the part of the worker may easily develop, followed by carelessness and general laxity.

Chocolate Making

In the chocolate-processing sections of the plant, a level of illumination of not less than 10 foot-candles is recommended. However, a step-up of this level of illumination is desired at the 5-roller mill, where a careful setting of the rollers must be made periodically. Supplementary lighting, having a predominant vertical component, should be used at this point, delivering not less than 25 foot-candles to illuminate the entire refining area.

Operators engaged in chocolate dipping use drippings from their fingers to make the designs on each piece. It is important that they see the relative position of the drippings from their hands over the confection, in order to make a neat and orderly design. A system of uniformly distributed lighting, well diffused, and producing not less than 20 foot-candles on the work, should be provided in each dipping room.

The seeing task in cream making is only of moderate severity, and measurements indicate that a system of general illumination of the order of 20 footcandles, with the light well diffused, will provide good seeing conditions.

At kiss-wrapping machines, general illumination of not less than 10 foot-candles should be provided over the entire area, with supplementary lighting of 30 foot-candles at the critical seeing points, which vary with different types of wrapping machines.

Gum Drops and Similar Candies

In mold fillers for gum drops and similar candies, the automatic injectors that press the fluid candy into the molds must be kept clean. Frequently the attendant wipes them or cleans out the orifices. At this point it seems desirable to have a good level of lighting. It would be provided by a fairly concentrated source hung above the equipment and directed toward the cornstarch molds. The white matte surface of the molds would then reflect the light to the injectors in an efficient manner. Tests indicate that 20 foot-

RECOMMENDED MINIMUM LEVELS OF ILLUMINATION

	CANDLES
Chocolate Making General Cleaning and Sorting of beans. Husking and Winnowing	10
Milling	10 General
Fat Extraction Crushing and Refining Feeding Dipping Packing Wrapping	10 10 10
Cream Making: Ingredient Mixing,	
Cooking and Molding	20
Kiss Making and Wrapping: All Opera-	10 General 30 Supplementary
Gum Drops and Jellied Forms: All	20
Operations	20
Ingredient mixing, Cooking, Cutting Die Cutting Machines	20 35 Supplementary
Sorting	40
Special Holiday Candy Molding and Hardening	
Hand Decorating	50
Box Making Scoring	10
Box Making	10 General
Special Box Making	20 Supplementary

candles of uniform illumination, well diffused, should be provided for these operations.

Hard-Candy Department

In the manufacture of hard candy, not less than 15 foot-candles of general lighting should be provided for ingredient mixing and cooking, and the levels of illumination should be increased by supplementary lighting to a minimum of 30 foot-candles at the die casting machine. This supplementary lighting should be located between the operator and the die casting machine to avoid glare.

In sorting and mixing hard candy by hand, diffusion of light is of prime importance because of the high glaze or specular surface of the candy. Lighting units with a relatively large luminous surface of low brightness should be installed 4 ft. above and over each mixing table. An illumination of not less than 40 foot-candles is recommended.

Packing

Where candy is being packed, whether it be by the progressive system, the stationary system or the circular method, tests conducted with a visibility meter show that not less than 20 foot-candles of illumination should be provided over the entire packing area. A system of uniform lighting, well diffused, providing this level of illumination, will provide satisfac-

tory seeing conditions.

In most up-to-date plants, the department making special holiday candy is generally located on the north side of the building, where the quality of daylight is best suited to the great amount of hand artistry generally required. In practically every factory studied, the tables where the art work is done were located near the windows. Here the operator decorates the molded candy with a thin, colored mixture of cream filling, which he applies with a small artist brush. Because of the intricate positions in which decorations must be placed on the confection, and the fine details of the decorations themselves, the seeing task is severe. Tests conducted with a visibility meter indicate that not less than 50 foot-candles are needed on the work. Hence, the general lighting in this area should be supplemented by well-designed local lighting to afford adequate seeing conditions, A partial color correction is often desirable.

Box Making

Where the factory makes its own boxes, this department is generally divided into two main sections, one devoted to making standard boxes and the other to special boxes. Scoring, the first operation in making boxes, is mechanical. Light of a predominantly horizontal character should be used. Extreme care must be taken so that the frame holding the scoring knives does not cast a shadow on the flat cardboard surface. All light sources should be located between the operator and the frame of the scorer, thus providing the correct direction of light and avoiding shadows under the frame holding the scorers. Depending on the location and the number of scorers used, a system of general lighting providing a minimum of 10 footcandles should be installed.

At the box-forming machines, to which the scored cardboard is conveyed, there is generally a contrast ratio of more than 75 per cent between the relatively dark machine and the containers, which are usually light in color. Hence, there is a slight specular reflection from the containers, so the direction of light becomes important. Supplementary lighting of 20

foot-candles or more should be provided whenever possible, from units installed on the ceiling, in conjunction with general lighting of not less than 10 footcandles. All supplementary lighting units should be so installed that the light will fall on the tool and die.

Silver- and gold-colored foil, as well as many special papers used as coverings, give a high specular reflection. When light is from the wrong direction, the detail of the foil is destroyed and the symmetry of the cover design is largely lost. Moreover, specular reflection causes discomfort to the operator. Hence, the direction and diffusion of the light is of prime importance. A minimum of 20 foot-candles should be provided at the tables where special art work on the containers is being completed.

N.C.A. Convention to Be Held in New York City, June 7-10

The 55th annual convention and the 15th annual exposition of the National Confectioners' Association will be held at the Waldorf-Astoria Hotel in New York City on June 7 to 10, 1938. This was the decision of a large majority of the Board of Directors of the Association. Wm. F. Heide, of Henry Heide, Inc., New York City, will serve as General Convention Chairman, and the exposition will be managed by Clapp & Poliak, Inc., formerly with and successors of Roberts Everett Associates.

Safety Congress to Have Papers Relating to Food Industry

A series of papers on safety in the food industry will be presented on Tuesday and Thursday, Oct. 12 and 14, during the 26th National Safety Congress & Exposition to be held in Kansas City, Mo., during the week beginning Oct. 11, under the auspices of

the National Safety Council.

R. R. Kampe, director of safety, Kraft-Phenix Cheese Corp., Chicago, will read a paper on "Safety and Sanitation as It Relates to Food Products," and Ellen D. McKeon, of the American Mutual Liability Insurance Co., New York City, will discuss "Eliminating Accidents Peculiar to Women in the Food Industry." An illustrated talk on "Safety Kinks in the Food Industry" will be given by H. J. Aldrich, of Spencer, Kellogg & Sons, Buffalo, N. Y. The effect of maintenance on accident reduction will be discussed in papers by Andrew J. Percival, of the General Time Instrument Corp., Peru, Ill., and H. E. Hildebrand, of the Continental Baking Co., New York City.

A general round table discussion on safety in the food industry will be held on the afternoon of Oct. 14, while the evening of Oct. 12 will be given over to a plant visit and buffet supper at the plant of the Liquid Carbonic Ccrp., at 1339 Liberty St., Kansas City, where the manufacture of "dry ice" will be ob-

served.

In the printing of Dr. C. P. Harris's review of the new book on "Cacao Fermentation" in the August issue of "The Manufacturing Confectioner." a note by Dr. Harris giving the author's name was inadvertently omitted from Dr. Harris's review. The author of this valuable book is Arthur W. Knapp, as reported in the first announcement of the book, appearing on page 36 of the July issue of "The Manufacturing Confectioner."

The Modernized General Offices of Mars, Incorporated Present an Interesting Example in the Use of . . .

Efficient Lighting and Decorating



The somber atmosphere of the office shown above has been replaced by the bright, cheery glow (see illustration below) that comes from large light intensities, well placed, with ceiling and wall surfaces that reflect and diffuse the light.



BEFORE

AFTER redecorating and installing a new lighting system of higher intensity, the offices of Mars, Inc., Chicago candy manufacturer, was transformed from the unsatisfactory condition presented in the top view to the well-lighted office shown in the bottom view. First, a cork-board ceiling was installed. This was not painted but was left its natural light color, giving a high degree of light reflection. The walls and pillars were painted a cream color, stippled with green. Curtis lighting equipment was installed, and the desk lamps removed. The old methods of lighting provided only 8 footcandles of illumination, most of this coming from the 60watt bulbs in the desk lamps. The new lighting system provides 35 foot-candles, and is an excellent combination of direct and indirect lighting. The light in the main portion of the office is provided by 16 recessed ceiling units of 500 watts each, and 10 wall luminaires using 300-watt lamps for the indirect-lighting units and 40-watt lamps for the illumination of the fixture exterior. Other sections of the office (balcony and below the balcony) are illuminated by 79 indirect pendant luminaires with X-ray reflectors.

AFTER

(Cuts furnished by "Buildings and Building Management")

Operating and Expense Factors in Retail Confectionery Stores

THE fourth annual (1937) retail survey made by Dun & Bradstreet, Inc., is based on profit and loss statements for 1936, contributed by more than 26,000 retail concerns. Of these, 127 were candy and confectionery stores, and a separate report has been issued based on the statement of these 127 establishments. This report can be of assistance to every retail candy and confectionery establishment, who can use the survey ratios as "yardsticks" for comparison with the firm's own operating statement.

The differences between average management and profitable management are shown in both Table I and Table II. The differences between 1936 and 1935 operations are given in Table I. Table II permits comparisons between stores doing a similar volume of business. Since regional conditions oftentimes affect the relation of merchandise cost to operating expenses, Table III groups the reporting concerns by geographical

As a guide to successful management, the typical figures given in the retail survey constitute a starting point for study by the manager of each enterprise, rather than an "average" towards which every retailer should

The following explanation of terms found in the tables should be read to preclude any likelihood of misunderstanding or misapplication of the data:

EXPLANATION OF TERMS

EXPLANATION OF TERMS
TYPICAL FIGURES. In combining the figures of the various reporting concerns the type of average used is the median and where this appears in the tables it is listed as a typical figure. For example, Cost of Goods Sold (in percentage of sales) is first computed from the statement of each concern; these percentages from the various reports are arranged in order of their size and the one half-way down the list is the median. If the statements of eleven concerns in a group showed Cost of Goods Sold as the following percentages of sale—80.2, 78.0, 76.3, 76.1, 76.0, 75.9, 75.7, 74.9, 72.6, 69.5, 58.0—the median figure would be 75.9, the sixth one in order. One great advantage of this method is that a few very unusual cases do not pull the average away from the central position.

1c—TABLE I, 1b—TABLE III—TYPI-

Ic—TABLE I, 1b—TABLE III—TYPI-CAL NET SALES. This figure may be taken as representative of the sales of individual stores. Because the median is used, it is not appreciably influenced by the larger sales volumes of concerns operating more than one establishment.

Profit and Loss Statements in Percentages of Net Sales

ages of Net Sales

2—COST OF GOODS SOLD. Opening inventory (January 1, 1936) plus purchases during the year minus the closing inventory (December 31, 1936). Gross margin (Item 5) and this item total 100%, or total sales. In lines where manufacturing expense is a part of the "cost of goods sold," we have assumed that manufacturing salaries and wages make up a considerable portion of this expense item. In other cases, however, manufacturing salaries may be included with 3a "Salaries of Owners and Officers."

3a—SALARIES OF OWNERS AND OFFICERS. In those cases where no owner's salary was reported, the usual owner's salary for that size of concern was deducted from profits and added to the expenses. Consequently, some concerns which originally reported a net profit became unprofitable after a reasonable allowance was made for the owner's salary.

3h-ALL OTHER EXPENSE. This item should not be used as a guide to what miscellaneous expense should be.

Merchandise Ratios

5a, 5b—UPPER AND LOWER LIMIT OF USUAL EXPERIENCE. These fig-ures are known statistically as the "in-terquartile range." From a list of fig-ures arranged in order as described above

in the paragraph on "typical figures" the item one-quarter of the way down the list is selected as the high end of the

range, or upper limit, and the item three-quarters of the way down the list is selected as the low end, or lower limit.

REPORT ON CANDY AND CONFECTIONERY STORES

		. A	H Co	nceres		Profitable
		1995*		1936		Concerns 1936
1	(a) Number of Concerns Reporting	97		127		81
	(b) Aggregate Net Sales.	\$ 1,774,900				1,179,400
_	(c) Typical Net Sales		_	\$12,000		\$11,900
	PROFIT AND LOSS STATEMENT (in percenta					
2	Cost of Goods Sold	60.5	%	67.3	%	65.19
3	Overhead Expense: Total	36,1	%	28.6	96	26.49
	(a) Salaries of Owners and Officers	16.2	96	10.4	%	9.49
	(b) Salaries and Wages of Employees	9.2	%	6.5	%	5.89
	(c) Rent	5.6	96	4.6	96	4.29
	(d) Advertising		96	0.4	96	0.49
	(e) Light and Heat	3.1	96	2.7	%	2.79
	(f) Taxes	0.6	96	0.4		0.39
	(g) Bad Debts	XXXX	-	(0.4	90	(0.49
	(h) All Other Expense		%	3.6	%	3.69
4	Profit (or Loss)	1.4	%	4.1	%	8.69
	MERCHANDISE RATIOS:					
5	Cross Margin (Percent of Net Sales)	39,6	%	32.7	%	34.99
	Usual Range S (a) Upper Limit		96	45.1	96	44.69
	of Experience (b) Lower Limit	25.0	%	24.4	%	26.39
6	Realized Mark-up. (Percent of Cost)	65.4	%	48.6	%	53.79
7				12.8		18.3
	Usual Range ∫ (a) Upper Limit			18.6		18.5
	of Experience (b) Lower Limit	10.2		8.2		9.1
8	Ratio—Net Sales to Closing Inventory	17.6		18.7		20.4
	OTHER INFORMATION:					
9	Typical Percent Change:					
	(a) in Sales from previous year (+ or -)	+10.8		+14.4		+20.09
	(b) in Inventory during the year (+ or)	+ 3.0	%	+11.3	%	+17.79
10	Credit Policies:					
	(a) Number of "Cash" Concerns (over 90% Cash)	82		97		61
				2.00		

(c) Their Typical Proportion of Credit Sales... ing Figures will be found in Tables II and III of last year's Retail Servey

Because of the small number of concerns reporting bad debt losses, this item of expense is not included in the typical expense total.

25 %

In other words, the experience of half of the reporting concerns lies within the "usual range."

The upper quartile figures for "Gross Margin" and "Inventory Turnover" are frequently better "goal" figures towards which a retailer should strive than those reported as the average for profitable concerns. This is especially true for con-

cerns that are operating with a larger than average expense, when such a sit-uation is justified by special operating conditions not generally prevalent among the concerns in the trade.

6—REALIZED MARK-UP (% OF COST). This is the same thing as Gross Margin but expressed as a percentage

of cost instead of a percentage of sales. For instance, a 33% realized mark-up on cost is equal to a 25% margin on sales. Retailers should beware of pricing goods with this "Realized Mark-up" as a guide. In many trades, it is necessary to start with a mark-up higher than the realized average on types of goods particularly (Turn to page 43)

Table II-All Concerns and Profitable Concerns—Typical Operating Ratios by Size of Concern and Size of Town—1936

			POR OPERA	TING AMALTS	S OF INDIVIDUAL CO	MCERRE				
			ALL CONC	ERNS				PROFITABLE C	ONCERNS	
SIZE OF CONCERN (1996 Sales in Thousands of Dollars)	1 to	10 to 20	20 to 30	30 to 50	50 to 125	1 to	10 to 20	20 to 30	80 to	50 to 55
SIZE OF TOWN (1930 Census in Thousands)	A11	All	All	A11	All	All	All	All	All	an
(a) Number of Concerns Reporting (b) Profitable Concerns, % of Total No	61 63	42 71	22	6 33	6 33	32	30	16	2 -	2
PROFIT AND LOSS STATEMENT	(in Percenta	ges of Net 3	iales):							
2 Cost of Goods Sold	67.3	69.0	66.6	72.4	67.6	84.4	67.1	62.3	-	-
Overhead Expense: Total (a) Salaries of Owners and Officers (b) Salaries and Wages of Employees (c) Rent. (d) Advertising (e) Light and Heat (f) Taxes (g) Bad Debts (h) All Other Expense	29.2 11.8 5.1 5.9 0.5 2.8 0.4 (0.5) 2.7	26.4 9.3 6.2 3.5 0.3 2.7 0.4 (0.3) 4.0	31.0 6.8 9.5 5.2 0.5 2.0 0.5 (0.2) 6.5	24.6	52.0	26.6 11.8 3.3 6.9 0.6 2.8 0.3 (0.6) 2.0	26.0 9.3 4.0 3.2 0.2 2.6 0.3 (0.3) 5.6	35.4 6.8 9.5 4.6 0.5 2.2 0.3 (0.2) 9.6		
4 Profit (or Loss)	3.6	4.6	2.4	3.0	0.4	9.0	6.9	4.3	-	-
MERCHANDISE RATIOS:										
5 Gross Margin (Percent of Net Sales) 6 Realized Mark-up (Percent of Cost)	32.7 48.6	31.0 45.0	33.4 50.2	27.6 38.2	32.4 48.0	35.6 55.4	52.9 49.1	37.7 60.6	:	
7 Inventory Turnover (Times per Year) 9 Ratio—Net Sales to Closing Inventory	11.1 16.5	10.9	17.7 26.6	32.6 45.0	20.7 F	18.1 20.4	12.7 19.0	18.0	:	:
OTHER INFORMATION:										
9 Typical % Change in Sales 1935-36	+12.0	+14.9	+22.7	+11.4	+25.0	+20.0	+20.5	+20.0	-	-

e The reporting cencerns are scattered thru all sizes of towns, but the limited number of cases makes it necessary to show only the more significant grouping by size of concern.

3 Emt

Table III-Trade Information and Typical Operating Ratios by Census Areas-1936 SHOWING REGIONAL DIFFERENCES IN TRADE CONDITIONS

West

6 East

South

		المحرب	England	Atlantic	Central	Central	Atlantic	Central	Central	Mountain	Pacific
1	All Concerns	(a) Number	12	25	32	14	11	(2)	(8) 10e	(8)	(17) 23
	Reporting	(b) Typical Net Sales	20,200	12,000	11,300	12,900	14,500		10,000		9,800
	PROFIT	AND LOSS STATEMENT (in Pe	rcentages of Na	et Sales):							
2	Cost of Good	s Sold	74.6	74.6	63.2	68.3	70.9		67.5		58.4
3	Overhead Exp	ense Total	21.4	25.4	30.6	30.2	26.2	This	28.0	This	32.6
	(a) Salaries o	f Owners and Officers	8.0	10.2	11.8	10.8	9.5	Area	11.8		9.6
	(b) Salaries a	nd Wages of Employees	4.9	5.8	6.3	7.0	7.1	Combined	6.2	Area	9.2
		2.7222000000000000000000000000000000000	2.9	3.4	4.7	5.2	3.8	With	3.5		6.6
		18	0.2	0.4	0.3	1.1	0.3	Column 7	0.6	Combined	0.7
		Heat	2.3	2.2	2.9	3.9	2.3		2.3	353.43	2.7
			0-3	0.7	0.4	0.4	0.4	West	0.6	With	0.3
		ts	(0-2)	(0.4)	(0.2)	(0.6)	(0.2)	South	(0.6)	Column 9	(0.6)
	(h) All Othe	r Expense	2.6	0.7	4.1	1.8	5.0	Central	5.1	Pacific	0.0
4	Profit (or Lat	18)	4.1	2.1	6.3	1.6	2.9	States	4.7	States	9.0
_	MERCHA	INDISE RATIOS:									
5	Cross Margin	(Percent of Net Sales)	25.5	25.6	36.6	31.7	29.1		32.7		41.6
7	Inventory Tur	nover (Times per Year)	18.5	10.1	11.5	13.3	15.9		16.0		10.2
	OTHER	INFORMATION:									
9	Typical % Chy	ange in Sales 1935-36 (+ or —)	+10.5	+20.6	+14.2	+12.0	+11.7		+14.4		+19.8
1	Profitable	(a) of Total Number	33	48	69	64	64		90		78

Concerns,
Percentage (b) of Sales Volume 34 70 69 58 17 • This figure is the sum of the number of concerns in the combined areas. Number of concerns reporting from those several areas appear in parentheses in their proper columns.

Now note under Table I



Saving or Earning?

PENNY saved is a penny earned, says an old maxim. A lot of effort concentrated on earning may not produce as good results as the same amount of effort on saving. This is often the case in manufacturing. When price agreements fail, when sales quotas fall short of their goal, when the dreaded "saturation point" in sales is reached, we can't expect further earned pennies.

But the door is not closed to saving. Almost always ways can be found to reduce expenses. Every needless cent lopped off of expenses is a cent saved. Perhaps it can be done by increasing the efficiency of labor, by installing automatic equipment, by rearranging the plant layout, by better maintenance of equipment, or in any one of hundreds of ways.

Earning pennies may not be easy, or may require a great deal of expensive effort, depending on the competitive situation, over which the individual manufacturer has little or no control. But there is no excuse for not *saving* pennies. In a tight competitive situation, more emphasis could well be put on saving, and less on earning.

Growth Brings Disorder

THE individual manufacturing plant is generally a conglomeration of departments, with their machinery and equipment, brought together in an unsystematic manner and functioning without much evidence of efficient coordination. It is natural that growing businesses should be more or less haphazard in layout and functioning. Such a condition does not imply carelessness in management so much as it does a growth that has been dictated by necessity rather than by reason. A new department is added here and there, this or that department is extended, new equipment is occasionally added, and perhaps a new automatic machine will not fit the old space and must be placed diagonally, thereby cutting off a corner or section of the room; and every time a change is made, the revamping of the entire plant would not be warranted.

But, under such circumstances of growth, the plant is necessarily growing less and less efficient, until the time arrives when consideration must be given to a complete revision of the plant layout, in order to take advantage of possible efficiencies in operation.

It is at this point that the independent consulting

engineer can be of help, for his wide experience with a multitude of similar or related situations gives him a familiarity with many problems not enjoyed by the management itself, working under the direction of the plant management, he can cut lost motion, increase labor efficiency, and establish maintenance schedules that will insure proper operation of equipment. By bringing into the problem the outsider's point of view, and coordinating his experiences with the traditions of the business, he finds a surprisingly large number of ways to cut costs, improve the product, and at the same time create a more satisfied personnel.

create a more satisfied personnel.

The consulting engineer who is "tops" among his clients gives attention to the human problem as well as the machine problem.

Fair-Trade Agreements Lag

of trade-marked goods, it might seem strange that the trade is showing no great degree of interest in the Miller-Tydings law recently signed by the President, which extends the provisions of the "fair trade" laws of the several states to include goods in interstate commerce. Though it is left to the initiative of the manufacturer to take advantage of the law, it seems that the benefits of the law would accrue to the jobber and wholesaler rather than to the manufacturer himself, except in those cases where distributors are organized to take advantage of the act, and can convince the manufacturer that the act works for his benefit also. At present, the confectionery manufacturers are taking the position of "we'll wait and see."

Jobbers and wholesalers may be tempted to take advantage of the situation by increasing their hold on the trade through their respective organizations, with the view to getting the manufacturers to maintain stated prices under the fair trade laws. In that case, a word of warning regarding the nature of such organizations would be in order, for the Federal Government is emphatic in stating that evidence of collusion between competitive individuals or groups to maintain prices will result in vigorous prosecution against the offender. The states' fair trade laws, supplemented by the Miller-Tydings law, legalize price-maintenance contracts between the individual manufacturer and those distributing or selling his trade-marked products, but the bars are not let down regarding agreements between manufacturers, or between jobbers, or other groups, to maintain prices.



THE INDUSTRY'S CANDY CLINIC

HELD MONTHLY BY THE MANUFACTURING CONFECTIONER

The Candy Clinic is conducted by one of the most experienced superintendents in the candy industry. Some samples represent a bona-fide purchase in the retail market. Other samples have been submitted by manufacturers desiring this impartial criticism of their candies, thus availing themselves of this valuable service to our subscribers. Any one of these samples may be yours. This series of frank criticisms on well-known, branded candies, together with the practical "prescriptions" of our clinical expert, are exclusive features of the M. C.

THIS MONTH

BAR GOODS

Code 9A 37

Peppermint Pattie—2 oz.—5c (Purchased in a drug store, New York, City.)

Appearance of Bar: Good. Size: Good.

Wrapper: Glassine printed wrapper. foil back in center.

Coating (dark)—Color: Good. Gloss: Fair. Taste: Good.

Remarks: A good eating pattie. Suggest that color of fondant be checked up. Very neat and attractive wrapper.

Code 9B 37

Chocolate Caramel Peanut Waffle— 1½ oz.—5c

(Purchased in a drug store, New York, City.)

Appearance of Bar: Good. Size: Good.

Wrapper: Printed glassine wrapper, inside wrapper brown wax paper.

Coating (light, with peanuts)—Color: Good. Gloss: Good. Taste: Good.

Center (layer of caramel on chocolate Nabisco cracker)—

Caramel: Good. Cracker: A trifle tough and soft.

Remarks: A bar of this type is good eating when fresh but is not good eating when the cracker gets soft. Bar is well made and would be good eating if the cracker could be kept brittle.

Code 9C 37

Caramel Peanut Bar—21/2 oz.—5c (Purchased in a drug store, New York, City.)

Appearance of Bar: Good.

Size: Good.

Wrapper: Printed wax.

Coating (light)—Color: Good. Gloss: Fair. Taste: Good.

Center (fudge caramel and peanuts)— Texture: Good. Taste: Good.

Remarks: This is one of the popular bars on the market. It is well made and good eating. The quality is good.

Code 9D 37

Fudge Peanut Caramel Bar— 21/4 oz.—5c

(Purchased in a drug store, New York, City.)

Appearance of Bar: Good. Size: Good.

Wrapper: Printed glassine, inside wax wrapper.

Coating (light)—Color: Good. Gloss: Good. Taste: Good.

Center—Texture: Good. Taste: Good. Remerks: Bar is well made and good eating. There are a number of bars of this type on the market. This is one of the best.

Code 9E 37

Pecan Roll—11/4 oz.—5c (Purchased in a drug store, New York.

City.)
Appearance of Bar: Good.

Size: Good.

Wrapper: Plain cellulose, gold printed band inside.

Caramel Pecan Coating: Nuts were old and had a bad rancid taste.

Center—Color: Good. Texture: Good. Taste: Good.

Remarks: Bar would be good eating if pecans were good. Bar did not look old. Pecans need checking up.

Code 9F 37

Chocolate Peanut Caramel Bar— 21/4 oz.—5c

(Purchased in a drug store, New York, City.)

Appearance of Bar: Good, Size: Good.

Wrapper: Printed glassine.

Coating (light)—Color: Good. Gloss: Good. Taste: Good.

Center-Color: Good. Texture: Good. Taste: Good.

Remarks: This is the best peanut caramel bar that the Clinic has examined this year. Bar is well made and good eating. This company is to be complimented on the uniform quality of all its bars.

Code 9G 37

Chocolate Coconut Cream Bar— 13/4 oz.—5c

(Purchased in a drug store, New York City.)

Appearance of Bar: Good. Size: Good.

Wrapper: Plain cellulose, printed band inside.

Coating (dark)—Color: Good. Gloss: Good. Taste: Good.

Remarks: This is the best coconut cream bar that the Clinic has examined this year.

Code 9H 37

Brazil Fudge Bar-21/2 oz.-5c

(Purchased in a drug store, New York, City.)

Appearance of Bar: Good.

Size: Good.

Wrapper: Printed cellulose.

Color: Good. Texture: Fair. Taste: Fair.

Remarks: Fudge is more like a tough chocolate cream bar. Brazils had an off taste, slightly rancid. Piece lacked chocolate flavor.

Code 9I 37

Chocolate Peanut Taffy Bar-13/4 oz.-5c

(Purchased at a news stand, Boston, Mass.)

Appearance of Bar: Fair.

Size: Good.

Wrapper: Printed glassine, cheap looking.

Coating (dark)-Color: Good. Gloss: Good. Taste: Good.

Center-Color: Good. Texture: Good. Taste: Good.

Remarks: One of the best peanut bars on the market. Suggest that the wrapper be improved, as it is cheap looking.

Code 9J 37

Chocolate Coated Nougat Bars-3 pieces-3 oz.-5c

(Two Vanilla and One Chocolate Bar) (Purchased in a cigar store, Boston, Mass.)

Wrapper: Printed glassine.
Coating (light)—Color: Good. Gloss: Good. Taste: Good.

Colors: Good. Texture: Good Taste: Good.

Remarks: The best light nougat bars that the Clinic has examined this year; well made and good eating.

Code 9K 37

Chocolate Coconut Cream Bar-

2 oz.-5c (Purchased in a drug store, New York,

City.)

Appearance of Bar: Good. Size: Good.

Wrapper: Printed glassine; in side wrapper of wax paper.

Coating (dark)—Color: Good. Gloss: Good. Taste: Good.

Center-Color: Good. Texture: Good. Taste: Bad.

Remarks: Could not eat bar as the coconut had turned very rancid. Bar is well made and would be a good eating bar if coconut was good.

Code 9L 37

Chocolate Nut Fudge Bar-21/4 oz.-5c

(Purchased in a drug store, Chicago, III.)

Appearance of Bar: Good; printed foil wrapper.

Size: Good.

Coating: Had completely bloomed. Center-Color: Good. Texture: Good.

Taste: Fair.

Remarks: Bar is well made but lacked a good chocolate taste. Suggest that better grade of chocolate or cocoa be used. This would improve the taste of the bar and would cost but very little more.

Code 9M 37

Chocolate Chew Bar-2 oz.-5c (Purchased in a drug store, Boston, Mass.)

Appearance of Bar: Good.

Size: Good.

Wrapper: Printed glassine wrapper, wax inside wrapper.

Color: Fair.

Texture: Too hard.

Taste: Fair.

Remarks: Bar is not up to standard. Cooked too hard and lacked chocolate flavor. Suggest bar be cooked lower and more chocolate be used to give candy a better chocolate flavor.

Code 9N 37

Chocolate Fruit and Coconut Paste Bar-2 oz.-5c

(Purchased in a cigar store, Boston, Mass.)

Appearance of Bar: Good.

Size: Good.

Wrapper: Printed glassine.

Coating (light)-Color: Good. Gloss: Good. Taste: Good.

Center-Texture: Good. Taste: Good. Remarks: This is the best bar of this kind that the Clinic has examined this year. Bar has a good fruit taste and is good eating.

Code 9O 37

Chocolate Nut Paste Bar-11/4 oz.-5c

(Purchased in a department store, San Francisco, Calif.)

Appearance of Bar: Good; printed foil wrapper.

Size: A trifle small.

Coating (light)-Color: Good. Gloss: Good. Taste: Good.

Texture: Good. Taste: Good.

Remarks: This is the best bar of its





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St	reet
Ci	ty
M	ark for attention of



PRODUCTS DEPARTMENT
CALIFORNIA FRUIT GROWERS EXCHANGE
189 W. Madison St., Chicago, Ill. Ontario, California 99 Hudson St., New York, N.Y.

kind on the market. Had a good taste; most bars of this kind have a had grease taste.

Code 9P 37

Chocolate Caramel and Coconut Bar -21/8 oz. -5c

(Purchased at a candy stand, San Francisco, Calif.)

Appearance of Bar: Good; printed glassine wrapper.

Size: Good.

Coating (light nut)—Color: Good.
Gloss: Good. Taste: Good.

Center-Texture: Good. Taste: Good. Remarks: This bar is new and a good eating bar. Coconut had a good, fresh taste and caramel blended well with the creamnut. Bar is of good size and well made.

Code 9Q 37

Chocolate Marshmallow Bar-1 oz.-5c

(Purchased at a candy stand, San Fran-

cisco, Calif.) Appearance of Bar: Fair; cellulose

wrapper, printed seal inside. Size: Small for a marshmallow bar.

Coating (light, with a cereal in it)-Color: Good. Taste: Fair.

Center-Color: Good. Texture: Fair. Taste: Good.

Remarks: Coating did not eat good as cereal became soft and tough. Marshmallow is not right; suggest the formula be checked. Bar did not make a good appearance, as seal was grease-stained. Suggest a printed cellulose wrapper be used. Coating would taste better if used without the cereal.

Code 9R 37

Fruit and Nut Bar-15/8 oz.-5c (Purchased in San Francisco, Calif.) Appearance of Bar: Good; printed cellulose wrapper.

Size: Good.

Coating (light)-Color: Good. Gloss: None. Taste: Fair.

Center (fruit nut paste) - Texture:

Good. Taste: Fair.

Remarks: If spice flavor were left out, bar would have a better taste. Nuts had a slight burnt taste. Suggest a little lemon or orange flavor be used in place of the spice.

Code 9S 37

Fudge Caramel Peanut Bar-33/4 oz.-5c

(Purchased in Chicago, Ill.) Appearance of Bar: Good; wrapper printed foil.

Size: Very large.

Coating (light)-Color: Good. Gloss: Badly bloomed. Taste: Fair. Center—Texture: Good. Taste: Good.

Peanuts: Soft and tough.

Remarks: Suggest that peanuts have a higher roast to keep them crisp. Bar is very large and very little, if any, profit can be realized at the present price of raw materials and increased cost of labor

Code 9T 37

Peanut Taffy Bar-13/4 oz.-5c (Purchased in a sports store, Chicago. III.)

Appearance of Bar: Good: glassine wrapper printed in green, red and vellow.

Coating (dark)—Color: Good. Gloss: Good. Taste: Good.

Center-Color: Good. Texture: Good. Taste: Good.

Remarks: As a rule a bar of this type does not "stand up" during the hot weather. This bar was in good condition, well made and good eating.

Code 9U 37

Nut Caramel Chew-2 oz.-5c (Purchased in a railroad station, Chicago, Ill.)

Appearance of Bar: Good.

Size: Very large; 2 pieces in a tray.

Wrapper: Glassine, silver center printed

Coating (dark)-Color: Good. Gloss: Badly bloomed. Taste: Fair.

Center (leaked badly)-Texture: Good. Taste: Little scrap.

Remarks: Center is not made right and it had leaked badly. It had a bad scrap taste. Unless bar is improved both in manufacturing and quality it will have a very short life.

Code 9V 37

Chocolate Cream Wafer and Peanuts —2 oz.—5c

(Bar Is Made of a Nabisco Cracker. Top Layer of Caramel and Peanuts.) (Purchased in a railroad depot, Chicago, Ill.

Appearance of Bar: Good.

Size: Good.

Wrapper: Inside brown wax, outside printed glassine, cellulose window.

Coating (light)—Color: Good. Gloss: Good. Taste: Fair.

Center-Candy: Good. Cracker: Had an old taste and a trifle soft.

Remarks: A bar of this type eats best when it is fresh. As a rule the cracker becomes soft or tough in a short time. Suggest cracker be checked up, as bar did not look old.

Code 9W 37

Almond Chew Bar-13/4 oz.-5c (Purchased in a drug store, Chicago,

Appearance of Bar: Good. Printed wax wrappers, red and blue. Three pieces wrapped in wax paper, inside wax wrapper.

Size: Good Color: Good. Texture: Good Taste: Good.

Remarks: This bar is well made and well wrapped. Bar was purchased during the last hot spell and was in perfect condition. A good eating chewy bar.

Code 9X 37 Butter Toffee Almond Bar-

1 oz.-5c (Purchased in a drug store, Chicago, III.)

Appearance of Bar: Good. Size: Good for this type of candy.

Wrapper: Printed cellulose wrapper, inside wrapper of wax. Coating (light)-Color: Good. Gloss:

Fair. Taste: Good.

Center: Color: Good. Texture: Good. Taste: Good.

Remarks: One of the best butter toffee bars on the market. Well made and an attractive cellulose wrapper.

Code 31 37

Light Nougat Bar and Caramel-2 oz.—5c

(Purchased in a drug store, Chicago,

Appearance of Bar: Good; printed foil wrapper.

Size: Good.

Coating (light)-Color: Good. Gloss: None. Taste: Fair.

Center-Color: Good. Texture: Good. Taste: A trifle rancid.

Remarks: Suggest formula be checked up as bar had a slight rancid taste. The hot weather may have caused the nougat to taste off. Caramel had a good taste.

Code 9Z 37

Fig Paste Bar-21/4 oz.-5c (Purchased in a drug store, Chicago,

Appearance of Bar: Good; printed glassine wrapper, cellulose window.

Size: Good. Coating-Color: Good. Gloss: Fair.

Taste: Good Center (fig paste)-Color: Good. Tex-

ture: Fair. Taste: Fair. Remarks: Center is too "pasty." Suggest bar be made more like a short jelly. Piece did not contain enough figs and lacked a good fig taste. Suggest the amount of figs be doubled.

Code 9AA 37

Chocolate Peanut Marshmallow Bar -21/4 oz.-5c

(Purchased in a drug store, Chicago,

Appearance of Bar: Good; printed cellulose wrapper, inside wrapper of wax paper. Size: Good.

Coating (light)—Color: Good. Gloss: Good. Taste: Fair.

Peanuts: Soft and tough.

Center-Color: Good. Texture: Good. Taste: Fair.

Remarks: Bar is not good eating because peanuts were not roasted enough and were soft and tough. Peanuts used in coating should have a higher roast and be completely covered by the coating or they will become soft and tough.

Code 9BB 37

Licorice Sticks-11/2 oz.-5c (Purchased in a drug store, Boston, Mass.)

Appearance of Package: Good.

Size: Good. Wrapper: Plain cellulose, gold and

silver seal. Color: Good. Texture: Good.

Taste: Good.

Remarks: This type of licorice candy is disappearing from the candy counters. We doubt that this type of licorice candy will ever be a big seller again, yet some people still like it.

FLAVORS

b y

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KALLISTAROMS

Rum & Butter Toffee No. N 1026 Honey & Butter Toffee No. 100 Butterscotch No. N 1127 Cream Toffee

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FORTAROMS

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Write for information and suggestions for use in candies

SCHIMMEL & CO., Inc.

601 West 26th Street, New York, N. Y.

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OPERATING AND EXPENSE FACTORS

(Continued from page 37)

subject to mark-downs, spoilage, etc.

7—INVENTORY TURNOVER (TIMES PER YEAR). "Cost of Goods Sold" divided by the average of opening and closing inventories (beginning and end of the year, merchandise only, not equipment and fixtures). In a line where inventories are highly seasonal and may on January 1st, be above or below the year average, this ratio may be inaccurate, but it is the one customarily used. (See Paragraph 5 above for explanation of "Usual Range of Experience.")

8—RATIO OF SALES TO CLOSING INVENTORY. Although included in the Survey because it is widely used and easier to compute than the "Inventory Turnover," this ratio is less reliable as a guide, and least reliable in those trades which operate with a fairly high markup. Under this method of figuring, two stores which actually turn over their stocks at the same rate but differ in their average mark-ups, would appear to have different rates of turnover.

Other Information

9a—PER CENT CHANGE IN SALES FROM PREVIOUS YEAR. In figuring the change in sales, the concerns are grouped according to their 1936 sales volumes. A concern reporting sales of \$45,000 in 1935 and \$52,000 in 1936 was classified in the \$50,000 to \$100,000 size group, although the percentage of sales increase was determined on the 1935 base.

9b—PER CENT CHANGE IN INVENTORY DURING THE YEAR. Per cent change in inventory during 1936 is figured with the inventory at the beginning of the year as 100%.

10a-NUMBER OF "CASH CONCERNS"

(90% OR MORE CASH). In most trades a concern reporting less than 10% credit business does not encourage charge accounts but merely accommodates friends and employees to a limited extent. Consequently, all such have therefore been classified as cash stores.

10b—NUMBER OF CONCERNS SELL-ING ON OPEN CREDIT. These include concerns selling more than 10% of their volume in open credit. Many concerns did not give their proportion of cash and credit business. Conclusions regarding credit policies in the trade should be drawn from the numbers tallied under these items rather than on the basis of the total numbers of concerns noted at the top of the Survey sheet.

10c—THEIR TYPICAL PROPORTIONS OF OPEN CREDIT BUSINESS. This applies only to the concerns tallied under item 10b and therefore cannot be used to compute the dollar volume of credit or installment business for the trade as a whole.

TECHNICAL LITERATURE DIGEST

OF INTEREST TO THE CONFECTIONERY INDUSTRY

Fondants and Like Confectionery



Deutsche Staerke-Verkaufsgenossenschaft e. G. m. b. H. Ger. 638,294, Nov. 12, 1936. (Cl. 53f. 3).

A GERMAN patent covers a confectionery base consisting mainly of sugar and syrup mixed in the cold with a levulose solution, and with the evaporation residue of a syrup containing 28-36 per cent of glucose at 45° Bé. The resulting product is said to be non-hydroscopic.

The Hydrolysis of Protopectin and Hemicelluloses of Fruit During Heating



N. V. Saburov, E. N. Dudkina and L. V. Kaperina. Konserunaya Prom. 1936, No. 3, 20-9.

THE softening of apples on boiling is indicative of the breakdown taking place in the pectous and cellulosic constituents of the fruit. Since the confectioner uses apples primarily for their pectous con tent (i.e., in jelly manufacture) it is important to note the conditions under which the fruit may be cooked with the least pectin destruction. By neutralizing the fruit acid to pH corresponding to a minimum of hydrolysis it is possible to use fruits which ordinarily would not be suitable. Green fruits generally have the greater tendency toward breakdown and softening, probably due to their higher acid content. At temperatures from 60-96° C. (140-210° F.) from 1-16 per cent of the protopectin of the fruit is hydrolyzed.

Fruit Jellies IX. The Role of Pectin 5

George L. Baker, Univ. Del. Agr. Expt. Sta., Bull. 204, 89 pp. (1936).

NINTH in the series of enlightening bulletins on the actions of pectin during fruit jelly manufacture by these distinguished pectin investigators. Every candy chemist interested in pectin jellies should have a complete file of these bulletins in his library.

The Determination of Sucrose in Chocolate Paste



F. Th. van Voorst. Chem. Weekblad 33, 743-6 (1936).

THE sugar is inverted and the levulose determined by the method of Luff. The sucrose is calculated from a formula which the author gives.

Chemical Composition and Fermentation Studies of Citron

C. R. Fellows and E. G. Smith. J. Agr. Research 53, 859-67 (1936)

THE flavor, texture, and color of preserved citron are improved by replacing 35 per cent of the cane sugar with dextrose. A moisture content of 17-19 per cent in the jar-packed product is sufficiently low to prevent yeast fermentation and mold growth.

The Phosphatide Content of Cacao Powder and Cacao Fat and the Detection of the Addition of Lecithin to Cacao Products

K. Braunsdorf. Z. untersuch. Lebensm. 73, 38-43 (1937).

SIX different cocoa powders were tested to determine whether lecithin had been added. Because of the varying phosphatide contents of the alcoholic extracts and the "extraordinary" variation of the phosphoric acid in the ether extract it was impossible to determine from such data whether lecithin had been added, and if so, to what extent . . (Lecithin additions are practiced to secure better suspension of the powder, and to facilitate the removal of fat from the liquor.)

Manufacturer Versus Moths



J. Valentine Backes, A.R.C.Sc., A.I.C., D.I.C. Food Manufacture, 264-6, August, 1937.

ETHYLENE oxide, a colorless liquid boiling at 51° F. to give an inflammable vapor 1.7 times heavier than air, has a number of advantages as a fumigant gas in the candy and confectionery industry, it being effective against all forms of insect life and equally destructive to the egg, larvae, pupae and adult forms. Its toxicity to human beings is no greater than ammonia of the same concentration, though in concentrations of 3 per cent or over by volume the mixture is explosive. Increase in temperature increases the toxicity, a minimum temperature of 65° being recommended. Since the gas will penetrate cardboard and paper, it is also used to fumigate packed or crated goods, except those packed in moisture-proof wrapping. After proper ventilation, no trace of flavor or taint is left behind in the goods.

Nutritive and Therapeutic Values of the Banana

Research Dept., United Fruit Co., Boston, Mass. 143 pp.

AN interesting booklet has been prepared containing an extensive digest of the scientific literature on the banana. Other booklets put out by the same source offer suggestive recipes for a variety of products.





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COLLOIDAL BLACK is richer in tone, smoother in texture, and provides better eating and keeping qualities. Order a trial pound today.

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NEWS OF THE SUPPLY FIELD

EQUIPMENT · MATERIALS · MARKET INFORMATION · FIRMS · PERSONALS

Increases Floor Space of St. Paul Plant

The Minnesota Mining & Manufacturing Co. have announced a building and improvement program at their St. Paul plant, consisting of a new factory building which will give the plant 127,650 additional square feet of floor space, the general construction and building equipment to cost approximately \$440,000. Expansion of the present plant is made necessary through the increased volume of business in the various departments.

Fischbeck Appoints Davis & Davis, Inc.

Davis & Davis, Inc., Wrigley Building, Chicago, Ill., have been appointed sales representatives in the Chicago and Milwaukee territory for Charles Fischbeck Co., Inc., of New York City. Colonel Alex M. Davis and his son, Edward, members of the firm, have been active in this territory for the past 16 years. They will stock "Cefco" products.

Mathews Conveyer Co. Opens Detroit Office

The Mathews Conveyer Co., Ellwood City, Pa., announces the opening of an office in Detroit, Mich., in the Curtis Building, 2842 W. Grand Blvd., Room 319. The new office will be in charge of C. E. Jeremias and E. A. Smith, who are familiar with the Michigan territory and its requirements, and will be supplemented with sub-agents located throughout the State.

Carrier Obtains Factory in Syracuse

Carrier Corporation, Newark, N. J., has announced the purchase of the former Franklin plant in Syracuse, N. Y. The firm contemplates shifting 80 per cent of administrative and productive operations to Syracuse within one year.

Containers of Cabinet Woods

Nussbaum Novelty Company, Berne, Ind., has issued a folder showing an assortment of its re-usable containers of solid red cedar, walnut, maple and other cabinet woods in modern design. These fancy wooden utility packages can be used as sewing cabinets, humidors, cigarette and stationery boxes of every kind. The company is manufacturing containers to fit any line of goods.

Oat Products Help Preserve Food

An important discovery is the use of oat products, recently made available under the name of Avenex, a Quaker Oats Co. product, for preserving the flavor and retarding oxidation, rancidity and tallowiness in food products. The report recently made covering the work done over the past year at The Pennsylvania Agricultural Experiment Station indicates clearly the value of Avenex in the manufacture of ice cream and in the storing of frozen cream. Laboratory experiments and tests by manufacturers are said to show that

when ½ of 1% of Avenex is used the flavor of the ice cream, particularly if it is fruit ice cream, is improved and development of oxidized and tallowy flavors is retarded. Avenex is also being used in the manufacture of potato chips, nuts and mayonnaise, and it is also said to be of value in the manufacture of parchment, glassine, and other papers used around food products.

Knipschild Joins Milprint, Inc.

Milprint, Inc., Milwaukee, Wis., announces the appointment of Howard S. Knipschild as a representative in the Chicago area. Mr. Knipschild was formerly associated with the Thomas M. Royal Co. and the Dobeckmun Co., and prior to that he spent several years in the wholesale grocery field, becoming thoroughly familiar with food products and packaging problems peculiar to that industry.

Premium Exposition to Be Held in New York September 28-30

Both the practical and theoretical side of the premium question will be covered at the Atlantic Coast Premium Exposition round table meetings, to be held at the Hotel Astor, New York City, September 28 to 30. Howard W. Dunk, secretary of the Premium Advertising Association of America, reports that these sessions will be addressed by outstanding authorities. Among these will be Howard T. Hovde, of the Wharton School of Finance and Commerce, University of Pennsylvania; Pauline Beery Mack, director of home economics research, The Pennsylvania State College; and Jules Dundes, of the sales promotion department, Columbia Broadcasting System. The Children's Symposium, a successful feature of the National Premium Exposition, will be repeated.

Laboratory Colloid Mill

For making chocolate-milk and syrups, for extracting drugs, seeds and other organic materials for flavors, and generally for making emulsions and dispersions of small particle size and extreme stability, the new



Gaulin laboratory colloid mill has been announced by the Laboratory Equipment Co., 146 Lafayette St., New York, N. Y.

The capacity of this mill on free-flowing emulsions, at an actual zero rotor-gap setting, is approximately 15 gallons per hour. As little as 4 oz. of material can be treated in this mill. The high rotor speed necessary in a mill of this type is obtained by a gear train running in oil, giving the rotor a speed of 20,000 r.p.m., which is said to be constant regardless of fluctuations in load, viscosity, etc. Water cooling is employed to prevent overheating and decomposition. An air release on the grinding chamber makes it possible to force out all air before starting, thereby eliminating any possibility of foaming. Shaft expansion caused by heating will not cause the rotor to seize, since the grinding gap is not reduced.

This mill has been especially designed for ease of cleaning. Because of the simplicity of design and construction, for most purposes a simple washing through with water or solvent is sufficient to thoroughly clean the unit. The entire front of the unit and the rotor can be removed in a moment for cleaning, if desired. The unit is driven by a 1/2-hp., single-phase motor.

Candy Production Club of Chicago Holds Outing

A tournament was held by The Candy Production Club of Chicago on August 12, at the Kildeer Country Club. The weather was perfect and the courses were in excellent condition. There were 192 in attendance, including candy men and allied tradesmen. The day's program consisted of lunch, golf, free beer, ending with a banquet in the evening. A beautiful collection of prizes, 106 in all, were awarded.

Highlights of 1937 Sugar Act

A complete, concise outline of the Sugar Act of 1937 has just been published in a bulletin by Lamborn & Co., Inc., 99 Wall St., New York, N. Y. The bill was approved by President Roosevelt on September 1.



ELECTRIC HEATING UNITS AND DEVICES—GED-650—A colorful and illustrative bulletin which lists numerous small heating units of all kinds for a multitude of Issued by General Electric Company, Schenectady,

SELECTED LIST OF PUBLICATIONS, PUBLICA-TION No. 12.—A booklet containing list of publications with a brief description of all printed material issued to the general public by the Social Security Board, as well as certain publications of other government departments concerned with the administration of the Social Security Act. Issued by the Social Security Board, Washington, D. C.

"SEAMLESS"-BULLETIN SS-3 .- A booklet contain-

"SEAMLESS"—BULLETIN SS-3.—A booklet containing information on seamless flexible metal tubing with illustrations, Issued by the American Brass Co., American Metal Hose Branch, Waterbury, Conn.

ACME FLAT TOP AND OPEN MESH STEELBELTS.—A colorful folder containing the outstanding features of these belts. Issued by Acme Steel Company, Chicago III. cago, Ill.

PUT INTO YOUR CANDIES FRIES FLAVORS. An illustrated broadside on Fries "Tru-Conomy," "Standard" and "True Fruits" flavors. It indicates the type of flavor to be used in hard candies, gums and jellies, chewing candies, creams, caramels and toffee. Issued by Ross & Rowe, Inc., New York City.

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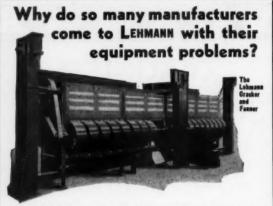
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PERHAPS it is because Lehmann has served them well in the past. Technical improvement in the cocoa and chocolate industry has been advanced materially through the cooperation of Lehmann's designers and engineers who, on many occasions, have created special units to meet special requirements. A notable example is the Lehmann cracker

We've solved cocoa and chocolate equipment problems for more than 100 years. We welcome them. Our highly trained, experienced technical staff is at your service.

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MAXIMUM Capacity 200 lbs. Form 6-Style R-Twin Puller

Minimum capacity 15 lbs. on each set of arms. Pulls either hard-boiled or soft - boiled

• Can be used for 2 batches at once—either the same or different colors or flavors.

REBUILT MACHINES AVAILABLE

Special low prices for all sizes and styles. Write for information and prices.

5 to 10 lbs. per batch FORM O - STYLE A

• Excellent for demonstra-tion purposes. It is very attractive, nicely finished, has an aluminum base and nickel trimmings. Motor driven.

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All replacement parts in ock for immediate delivery.



THE ORIGINAL CANDY PULLER HILDRETH PULLING MACHINE CO. 153 Crosby Street New York, N. Y.

Death of Howard H. Fiske

Howard H. Fiske, one of Boston's leading manufacturing confectioners, and owner of stores in Boston, Cambridge and Belmont, died suddenly on August 10 from heart disease while he was at his summer home at Lake Winnisquam, Laconia, N. H. He was 57 years of age.

Born in Chester, Mass., he spent his childhood in East Longmeadow and Springfield, where he received his early education. His first employment was with Kibbe Bros. Co., at Springfield, and later he became associated with W. F. Schrafft & Sons Corp., becoming manager of one of their local wholesale branches. In 1914 he entered the retail business for himself. He was the founder of the New England Confectioners Club, and had served as president and member of the Executive Committee of the Associated Retail Confectioners of the United States. He leaves a widow, two sisters, and father and step-mother.

The passing of Mr. Fiske has caused profound sorrow among his many friends in the confectionery industry, who recognized his sterling qualities and upright

CHOCOLATE FAT BLOOM

(Continued from page 30)

perior to blown cacao butter (adsorbed at the hydrophobic surface) in increasing "mobility" or "fluidity" of a chocolate containing a minority of cacao particles and a majority of sugar particles, as most chocolates do.

If one can imagine the nuclei of the higher-melting fractions of cacao butter (i.e. bodies with a hydrophobic surface) that normally will grow to crystals of appreciable size to give bloom, as being each completely surrounded by something that prevents the outside medium (particularly those high-melting portions in solution in the lower-melting oils that would enable the nuclei to increase in size) from gaining access to the nuclei, then obviously the nuclei will not grow and there will be no bloom. And, that, in substance, is what Dr. Clayton does with blown cacao butter which has a special adsorption-capacity on the surface of hydrophobic bodies, such as certain fat-nuclei and crystals, and cacao particles.

The reasoning is admirable, the experiments confirmative. He is making use of a protective colloid to keep the nuclei of the fat in the colloidal state, which may be explained possibly by his researches on olive oil, where he states "the stearin clustered molecules (Note: which I have termed "nuclei" in this article. R. W.) adsorb the blown cacao butter and a new and greater affinity for the oil medium is thereby (Note: the italics are mine.

That something more than this simple explanation will be found to be needed, there is no question, for blown cacao butter is specific to the "stearin" of olive oil and to nuclei of some of the fats in cacao butter. but not to the "stearins" of peanut and cottonseed oils,

Further, there is still to be answered that important question regarding the range of temperatures through which the addition of blown cacao butter remains effective in preventing bloom.

Again our prayers and blessings are upon the labors of Dr. Clayton and his co-workers, and we look forward to Part II of their publication with impatience.

D

THE CANDY MAN'S CALENDAR

		OC	TOB	ER		1937
SUN	MON	TUE	WED	THU	PRI 1	2
3	4			7	8	9
10				14		
24/51				28		

10th	Mon	nth-31 Days-5 Saturdays-5 Sundays
		PLANNING SEASON FOR WHOLESALE MFRS.: Valentine's Day Plans (Cont'd), Easter Packages (Cont'd), Christmas Production.
		PLANNING SEASON FOR RETAIL MFRS.: Lincoln's Washington Day Packages; St. Valen- tine's, St. Patrick's, Easter Novelties; Fall Xmas Production; Columbus Day, Hallowe'en.
1	Fr	Falls Cities Confectioners' Club, Louisville, Ky.* -Wolverine Candy Club, Norton Hotel, Detroit, Mich.*-Retail Confectioners' Assn., Hotel Ma- jestic, Philadelphia.*
2	Sa.	St. Louis Candy Salesmen's Assn., American Annex Hotel, 12:30 noon.;
3	S	Jobbers Salesmen's Assn. of Western Pa., Webster Hall, Pittsburgh.*
•	M	Candy Production Club of Chicago, Lake Shore Athletic Club, Chicago.*—Central N. Y. Candy Jobbers, Hotel Syracuse, N. Y.*—Chicago Candy Club, Maryland Hotel, Chicago.†—Valentine boxes should be selected soon.
6	w	Retail Confectioners' Assn. of Philadelphia, Inc., Turngemeinde Hall, 1705 N. Broad Street.*— Wholesale Candy Jobbers' Assn., Y. M. C. A., Lawrence, Mass.†— Colorado Confectioners' Assn., Oxford Hotel, Denver.†—Southern N. E. Wholesale Confectioners' Assn., Remington Hall, Y. M. C. A., Fall River, Mass.*
7	Th	Westchester County Candy Jobbers' Assn., Jewish Community Centre, Yonkers, N. Y.†—Cincinnati Candy Jobbers' Assn., Grand Hotel.*—Keystone Jobbing Assn., Chamber Commerce Bldg., Scran- ton, Penn.†
8	Fr	Assn. of Mfrs. of Conf'y and Chocolate of N. Y., Pennsylvania Hotel, N. Y. C.;
9	Sa	Kansas City Candy Club, Pickwick Hotel.*
9-17		Food and Better Housekeeping Exposition, Coliseum, Chicago.
10	S	Candy Week.
12	T	Columbus Day.
13	w	Manufacturing Confectioners of Baltimore, Hotel Emmerson.
14-16		National Assn. of Photo-Lithographers' Convention, Cleveland.
16	Sa	St. Louis Candy Salesmen's Assn., American Annex Hotel.—Sweetest Day.
18	M	Chicago Candy Club, Medinah, Chicago.
19	Tu	Candy Executives and Asst'd Industries Club, St. George Hotel, 51 Clark St., Brooklyn.*
21	Th	New York Candy Club, Inc., Park Central Hotel. —Hallowe'en displays all set up?
24-27	,	American Bakers Assn. Convention, Municipal Auditorium, Kansas City, Missouri.
27-30		Annual meeting, Assn. of National Advertisers Inc., Homestead, Hot Springs, Virginia.
28	Th	Mfrs. of Conf'y and Chocolate of State of N. Y. Pennsylvania Hotel, New York.*—Utah-Idah Zone Western Confectioners' Assn., Salt Lake City.*
30	Sa	Pittsburgh Candy Club, Pittsburgh, Pa.*
31	8	Hallowe'en.
		*Monthly Meeting. †Weekly Meeting. ‡Bi



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Adverse weather conditions don't worry Louis Sherry, Inc., Long Island City. They know that temperature and humidity in their plant are ideal for chocolate making... thanks to a Sturtevant Air Conditioning System.

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... Controlled drying assures a quick
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sealed in at the final
wrapping, brings
chocolates to the

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Leaders in the candy and biscuit industry are choosing "LUSTR-KOOLD" conveyors.

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Paul F. Beich Passes

Paul F. Beich, chairman of the board of the Paul F. Beich Company, candy manufacturers with factories in Bloomington and Chicago, Ill., died on September 9 in Chicago at the age of 73. Mr. Beich was widely known in the confectionery field and was a past president of the National Confectioners' Association. He entered the candy industry in 1890 in Bloomington. Starting as a salesman of candy for the firm of Bruce Brown & Co., Mr. Beich later operated as a jobber, then as a manufacturer. He was prominent in the affairs of the Illinois Manufacturers' Association, and in 1934 he was appointed a member of the committee to represent the association in the U. S. Chamber of Commerce in Washington, Mr. Beich was born in



Wehlau, Germany, and was educated in that country. He was a travel enthusiast, and also found delight in music and drama. He held membership in the Union League Club and the Illinois Athletic Club in Chicago and in the Bloomington Country Club, as well as in several fraternal organizations.

Mr. Beich is survived by his wife, Katherine M. Beich, and two sons, Otto G. Beich, president of the Paul F. Beich Company, and Albert C. Beich, who is in charge of the company's Chicago plant.

O. H. Wilts Joins Riegel Paper

O. H. Wilts is now exclusively connected with the Sales Division of the Riegel Paper Corp., 342 Madison Ave., New York City. Since 1912, Mr. Wilts has been active in the candy supply field and has been a member for many years of the Candy Executives Club of New York. His close familiarity with the problems of the manufacturing confectioner makes him particularly well qualified to render valuable service in the field of special packaging papers, for which there is a large demand from confectionery makers.

New Booklet on Celluloid

"The Plus Value of Doing Business With the Celluloid Corporation" is the title of a booklet describing the outstanding contributions that the Celluloid Corp., 10 East 40th St., New York, N. Y., has made to industry and public alike. Descriptions are given of various developments made in the corporation's laboratories, including transparent packaging material for wrapping and as a material for rigid containers.

CONFECTIONERS' BRIEFS

Sam Klempner has been appointed manager of the Candy Department of E. W. J. Hearty, Inc., 99 Hudson St., New York, N. Y. Mr. Klempner, who has been connected with the confectionery business for 18 years, was for many years with Spitz-Arnstein Co., importers of New York, in an executive capacity, and more recently was director of the Hollow Mould Department for Rockwood & Co., of Brooklyn.

E. W. J. Hearty, Inc., 99 Hudson St., New York, N. Y., have established connections with V. Kuze, Ltd., of Riga. Latvia, to handle their confectionery products on an exclusive basis for the United States.

Heikki Huhtamaki, managing director of Ipnos Oy., Turku, Finland, confectionery manufacturers, is visiting in the United States, studying modern manufacturing methods and packaging of candy and chocolate.

The Williamson Candy Co., Chicago, Ill., has discontinued its Brooklyn plant, and will confine all production operations to its Chicago factory.

W. B. Casterline, formerly president of Julia King, Inc., Chicago, is no longer with that firm.

E. C. Gould, of The Gardner-Gould Co., Burlington, Iowa, recently passed away after a brief illness.

William Edward Candy, former head of the Busy Bee Candy Co., St. Louis, Mo., was killed August 22 in an automobile accident. About fourteen months ago he moved to Nashville, Tenn., where he established another company, which bears his name.



S.W.C.A. Citizenship Trophy being awarded James J. Reiss. of New Orleans, by Aleck Abrahamson and Bert Rubin, of the Sweets Company of America, donors of the cup, at the New Orleans convention of the Southern Wholesale Confectioners' Association. The award will be made each year to the jobber that has done most in these four fields of activity: Improvement of the local market; strengthening of the wholesale confectionery industry in the South; same, on a national scale; and building membership and strengthening of the S.W.C.A.



Try the voss CARAMEL CUTTING BOARDS

of special lami nated material that will not chip, crack or fray. Long life double

The glazed enrober cooling tunnel belt the Candy Industry is now installing on all of their equipment, as it is CRACKLESS, contains NO RUBBER, will operate over sharp knife edge or nose bar without cracking. Extra long life—perfect bottoms—guaranteed, as it is double texture cushioned constructed. Proven by tests conducted past 9 months.

Send us today your specifications for a trial belt. Be convinced

BATCH ROLLER BELTS

Heavy tubular woven fabric—will not stretch or shrink—no seams—folded and reinforced edges sewed with tape—perfect running—double edge, double life.

ENDLESS ENROBER CANVAS FEED AND DELIVERY BELTS

Sewed on the bias-pliable laps-special woven fabric-perfect construction.

Why not write for samples and prices?

SERVICE-SATISFACTION-SAVINGS OSS BELTING & SPECIALTY CO.

1750-1756 Berwyn Ave. - CHICAGO, ILL.

"1,000 Manufacturers Can't Be Wrong"

THE SIMPLEX CREAM FONDANT SYSTEM

Will Increase Production—Reduce Labor and Operating Costs—Require
Less Floor Space—Improve Quality—

Adaptable for cooking and cooling perfectly all types of Hand Roll or Cast Creams on limited or production basis.

The "SIMPLEX" is now manufactured in several models (for cream fondant, toffees, grained mints, and hard candies), each descable to recovere striples are the controlled to the controlle

adaptable to your particular prob-lem and type of candy.

VACUUM CANDY MACHINERY CO. 15 Park Row New York City

■ A COMPLETE IMPORT-EXPORT INFORMATION SERVICE ●

1937 De Luxe Edition

Custom House Guide

and Monthly American Import and Export Bulletin

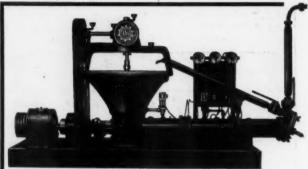
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Total Value \$24.00

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Including a beautiful, gold stamped, loose leaf binder, to hold a year's supply of "Bulletins" ORDER NOW

CUSTOM HOUSE GUIDE

BOX 7, STA. P. CUSTOM HOUSE NEW YORK, N. Y. (Write for free copy of Steamship Flags and Funnels, in Colors)



The **LAUENSTEIN** solves your tempering problem in the surest—most efficient way

Fully Automatic

TEMPERING MACHINE

system LAUENSTEIN

Simply turn hands of thermometers to degree wanted and the machine needs no further attention. It will deliver the chocolate correctly tempered to depositors or enrobers; no pump required.

Write for further particulars to:

T. C. Weygandt Company

167 Duane St.

New York, N. Y.



Summer season sales by manufacturers of confectionery and competitive products during May-July, 1937, were 12% over the corresponding three months period of last year.

Otto Weber, formerly sales manager of the Phillips Packing Co., Cambridge, Md., and prior to that with the A. E. Staley Manufacturing Co., Decatur, Ill., Angelus Campfire Co., Chicago, and Calumet Baking Powder Co., Chicago, has joined the advertising force of Chain Store Age.

Leon L. Peterson, formerly merchandising manager of DeMet's Candy Stores, Chicago, has become copy chief of the advertising firm of Carter, Jones & Taylor, South Bend, Ind. Mr. Peterson was also at one time connected with the Buchen Co. and the Wm. H. Rankin Co., both of whom are Chicago advertising agencies.

Conrad Spoehr, who has been acting as advisor to the estate of the Walter Birk Candy Co., Chicago, Ill., has completed his work at that institution for the present. He is continuing as technical advisor for several other concerns.

Canadian Convention to Be Held in Toronto This Month

The 19th annual convention of the Confectionery, Biscuit and Chocolate Industries of Canada will be held on September 16 and 17 at the King Edward Hotel in Toronto. The officers are W. H. Hamblin, of Hamblin-Metcalfe, Kitchener, Ontario, president, and R. H. Bedell, secretary and manager.

Candy Industry Makes Progress in Finland

Since Finland (known as Suomi by the natives) attained in 1917 the status of a sovereign state, industry has advanced in all branches, including confectionery, reports Heikki Huhtamaki, managing director of Ipnos Oy., Turku, Finland, manufacturers of chocolate, candy, licorice, biscuits and rye crisp. Today in Finland there are several prosperous candy factories of considerable size equipped with modern machinery and making high-quality products. The candy industry in that country comprises production of chocolate (confections, bars, pralines, etc.), soft and hard caramels, panned goods (dragees), various kinds of pastilles, licorice, etc. Caramels and chocolates are in great part sold wrapped in paper for hygienic reasons. In earlier days, Finland used chocolate confections of Russian type (large-size wrapped confections) having the distinctive Russian taste, but now chocolate and candy making and packaging are patterned after the West-European and American methods and tastes. All confectionery products in Finland carry an excise tax of 20%. The country exports some candy to the United States.

Food Technology Conference

The Massachusetts Institute of Technology, Cambridge, Mass., are sponsors of a Food Technology Conference to be held at the Institute on September 14 to 17. Most of the papers will be devoted to dairy products, canning, refrigeration and frozen storage, but the following papers will contain something of interest to confectionery manufacturers: "Effect of Low Temperatures on Enzymes," by Dr. A. K. Balls and H. Lineweaver, Bureau of Food Research, U. S. Department of Agriculture; "Packaging Materials and Their Application in the Food Industries," by Allen Abrams, technical director, Marathon Paper Co., Rothschild, Wis.; and "Air Conditioning for Food Plants," by James Holt, Massachusetts Institute of Technology.





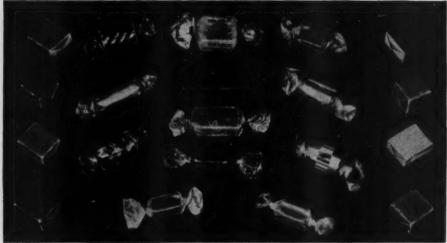
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- SUPPLIES
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MANUFACTURING CONFECTIONER

ALL WRAPPED ON OUR MACHINES



MEETING THE DEMAND

INDIVIDUALLY WRAPPED PIECES

Hard candy *individually wrapped* is today's demand—from both dealers and consumers. Here are two wrapping machines that meet this trend . . . offering a decided sales-advantage, plus important economies.

The Model 22-B wraps hard boiled and soft center pieces in a great variety of shapes and sizes. The machine uses transparent cellulose, glassine, or reinforced foil. Also produces combination type wrappers at a high rate of speed.

This versatility permits the wrapping of an entire line on one machine. Furthermore, "novelty appeal" may be obtained by the introduction of new products, new sizes and shapes, in new styles of wrapping.

The Model 42-B Plastic Cutting and Wrapping Machine is designed to cut and wrap caramels, toffee, and similar types of candy in fold-wrap style (heat-sealed). Fed in the form of a plastic rope, candy is sized, cut, and wrapped at a speed of from 250 to 500 per minute. The 42-B is easily adjusted to handle various sizes.

Of advanced mechanical construction—built for long life, and dependable production at high speeds. All movements of machine are generated inside a box frame and parts are constantly sprayed with oil from a 7-gal. sump by means of a gear pump and pressure pipe system.

Write for further information.

PACKAGE MACHINERY COMPANY Springfield, Massachusetts

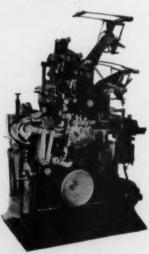
NEW YORK CHICAGO MEXICO, D. F.: Apartado 2303 CLEVELAND

LOS ANGELES

ICO, D. F.: Apartado 2303 Melbourne, Australia: Baker Perkins, Pty., Ltd.
Peterborough, England: Baker Perkins, Limited



MODEL 22-B



MODEL 42-8

PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

CANDY PACKAGING

AND MERCHANDISING AIDS

A SECTION DEVOTED TO BETTER PACKAGING AND MERCHANDISING METHODS

The RELATION of PAPER to the CANDY BOX

★ By VERNE C. FIELD

Member Candy Packaging Board of "The Manufacturing Confectioner"

THE first thing the buyer of packaged goods sees is the paper covering the box or package. This paper, known as the "wrap," can convey to the buyer a good or poor impression of the merchandise itself. If this impression is favorable, the customer buys the goods; and if it is unfavorable, he either does not buy or he selects something else. Generally the buyer of packaged goods does not trouble to open packages and inspect the merchandise, but he almost always depends upon the package itself to give him the impression of the merchandise.

Hence, it is no wonder that successful manufacturers of candy and other packaged goods lay great importance on the wrap. It is no wonder that many of them use wraps that other manufacturers might look upon as expensive. In the case of a box of candy retailing for a dollar, if the difference in cost between the best wrap and a poor wrap is only a fraction of a cent, the manufacturer would consider that small part of a cent as a good investment if it increased sales only by as much as a few per cent.

Gift Boxes Deserve Special Attention

There is a reason why manufacturers of boxed candy should be more "package minded" than the average user of paper boxes; and that is because, in contrast to other products which are consumed by the purchaser, fine packaged candies are in a great many cases bought as gifts to others. The buyer expects the package to make an impressive showing as a gift, and if it does he expects that the merchandise itself will be of good quality. Fine paper is highly desirable in making a good showing, and the unit of sale is priced high enough to permit the use of fine paper and obtain the finest packaging.

The design of the package—its shape and proportions-are of utmost importance, but these can be simplified to a great extent by the selection of an attractive

Of course the impression left by the wrap does not depend alone on the paper's texture and color, but the printed and embossed design should be carefully made. A good paper can be ruined by poor taste in the printed design, and likewise a good design adds attractiveness to an otherwise drab wrap.

Since the taste for candies varies widely, a wide range of package designs must be available. This can be accomplished by the proper selection of paper. The manufacturer can improve the appearance of his lowest-priced unit by using a good paper, without materially increasing the cost of the package. Good paper adds individuality to the character of the package.

Foil Wraps Add Distinction

Among the better papers coming into increased use for candy-box wraps, we might mention the foil papers. Foil wraps have been used a great deal during the last two years, and it is largely through their use that candy packages have taken on a new tone and distinc-tion. The foil is backed by paper, and is printed and embossed, then cut to size for the package. Manufacturers of foil wraps have installed the most modern equipment for printing and embossing. Such wraps are not expensive when cost is computed on the basis of a unit box or package. Even some of the manufacturers of low-priced confections are using foil wraps, in which wax paper may be used on the inside, thereby making the wrap self-sealing. These are usually plainly printed and not embossed.

The beauty of embossed foil has been further enhanced by covering the box with colored transparent cellulose. The cellulose might be used only over the lid, thereby protecting the foil, or the entire box might be wrapped and sealed in a cellulose sheet, which could take the place of the paper used by the retail store to

wrap the package.

Lithography in Candy Merchandising

* By O. F. LIEBNER

Central Lithograph Company

WHEN a candy manufacturer decides to put a new product of confection on the market, he has several things uppermost in his mind: First, his thought is, "How can I make this package attractive, to catch the eye of the consumer, and at the same time build up

sales for volume production basis?"

Naturally, in designing a package, one must make it appropriate to the name selected for the product, and therefore consideration must be given to the kind of confection going into the package. The shape of the box or package that is desired has also quite some bearing on just what kind of design can be made for this product, as usually the package is custom built, especially if there are a number of different packages in the manufacturer's line. The salesman and merchandiser is always looking for an individual package that is entirely different from the rest of the line.

Many angles are to be considered; some of the most popular confection packages are carried out entirely in white backgrounds, using a highly finished coated enameled paper stock. The white-background package seems to have a "cleanliness" appeal, especially if the package is wrapped with transparent cellulose before it

is distributed to the retailer.

The artist designing this package must keep his designs (incorporating lettering and brand name or trade mark) in a small space, usually well-centered at the top of the package, very often using gold embossing to embellish the appearance. On the other hand, should the package be of some such product as, for instance, "chocolate covered cherries," then the artist takes a greater leeway, making large cherries and panel designs with a larger and stronger motive of color schemes.

Years ago, there were a number of lithographers throughout the country who specialized in making stock box wraps for the candy manufacturers and covered the field very adequately, having designs that they would be able to use on many varied lines of confections.

Many of these stock wraps were designed for the various seasons or holidays throughout the year, and were made in large quantities, there often being several sizes to the same design to fit the large and smaller packages. In some sections these were sold as exclusive private designs, and in other places, semi-private, and later on the design would be rerun and sold in the open market to anybody who desired that type of picture.

At that time, most candy boxes were designed wholly on the basis of pictorial packages, covering most of the top surface of the box, though in later years this lithographed stock wrap soon faded out of the picture and most candy manufacturers of the country wanted their own individual designs. Very few stock wraps are sold now, especially to the larger manufacturers who can well afford to have exclusive wraps for their

goods.

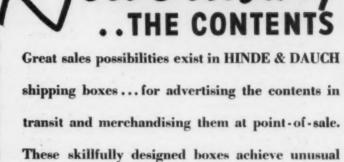
Lithography lends itself admirably to this merchandising problem because of the easy reproductive methods and the various kinds of finishes that can be added to the wraps by the addition of embossing dies and plates. Most manufacturers who are getting out new packages today are vitally interested in the results. Consequently, they themselves try to get some of their ideas incorporated, and the designer who can carry out their thoughts, with his own design combined, usually makes a desirable package. And very often a small counter display or a small package holder, lithographed at the same time with the wrap and mounted on cardboard, materially helps to advertise and get the package a prominent space on the retail counter, which in the end means sales of the candy manufacturer's merchandise.



Views of the new Display Salon opened by E. I. du Pont de Nemours & Co. in the Empire State Building, New York City.

Included are boxes, individually wrapped hard candy, trays, boats, and novelty packages of all descriptions.

effects. Outstanding colors attract the eye, create job for a shipping box.



favorable attention, increase sales. It's an important



HINDE & DAUCH Corrugated Shipping Boxes

HED Protects in Transit

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SHOWMANSHIP

EVEN MICKEY MOUSE DOES IT

Act V of

Showmanship in Business

By ZENN KAUFMAN

HISTORY is but the telling of the show-manship of the centuries—David and Goliath, Alexander with no more worlds to pick on, Nero and his fiddle, Columbus and Isabella's jewels, John Smith and Pocahontas, Napoleon's escape from Elba, Richard and the Crusades, the cry of the dying Lawrence, 'Don't give up the ship,' Custer's last stand, Franklin and his kite, Foch and the Marne, and all the other colorful incidents that stand out against the drabness of the past."

The paragraph you have just read is a quotation from a little booklet called "Put On a Good Show." It was distributed by Batten, Barton, Durstine and Osborne, a large and successful advertising agency. That one paragraph covers over 2,000 years of good

showmanship.

But today—in 1937—the very same principle still works. How many copies of this morning's paper could be sold if we took out the people? Without Hitler, Roosevelt, Mussolini, Lewis . . .? Without Pegler, Winchell—or even our good friend Skippy? What would a newstand look like without people on magazine covers—without that Ziegfeld chorus of beautiful gals that greets us as we buy our papers? What would radio be like without its Benny or Voice of Experience? Baseball without Gehrig or Hubbell? Opera without Pons or Tibbett?

Man is gregarious. Physically, he gathers in groups.

Man is gregarious. Physically, he gathers in groups. Mentally, even more so, he is always thinking about people. More than anything else in the world.

Kenneth M. Goode, co-author with me of "Show-manship in Business," has given us a great many important axioms for selling and advertising. But one of his greatest is: "If, for any reason, it is impossible to portray the product in the hands of a user, remember it is far more desirable to portray the user alone than the product alone." (See "How to Turn People Into Gold," Harper's.)

Names Boost Sales

Many of the outstanding merchandising jobs of the decade have been put over with tie-ups with people. "Call for Philip Morris" has immortalized Johnny the Bell Hop and Philip Morris cirgarettes. Under the guidance of Ken Goode and Milton Biow, Johnnie has risen to become America's number one Trade Mark. He walks! He talks! From the pages of magazines he comes to life as the soul of a great



Even in far-off South America, Wrigley's mascots, wearing their peaked hats, can be seen on placards and billboards.

radio program. George Rector, the famous chef, has done a marvelous publicity job for the A. & P. stores. Captain Eddie Rickenbacker brought a colorful flying personality to General Motors' Eastern Airlines. With equal skill, Chessie, a sleeping kitten, brought a new reputation to the uppers and lowers of the Chesapeake & Ohio Railroad. An analysis of railroad advertising made recently showed that with a smaller advertising budget than the other lines, C. & O.'s Chessie had done the years' outstanding promotion job. Animals, curiously enough, have this thing called "human interest." "Give me a gal and a little pup," writes someone, "and I can sell anything man thinks up."

The film-star success of merchandising is Mickey Mouse, whose name has sold millions of dollars of merchandise for thousands of stores—from rubber balls to sweat shirts. Mickey not only nibbled his way into the Encyclopedia Britannica, but, in the words of a Federal judge, "pulled a toy-train factory out of bankruptcy." In the seven years since Mickey's creation, Walt Disney, previously an unknown and often discouraged artist, has become a millionaire. If the late King George V of England refused to attend a motion-picture performance until assured of Mickey's presence, then who are we to refuse to use his force in our selling?

People not only attract attention, but they create a sense of realism to your advertising. The Standard Oil stations that put "Call Me Joe" on attendants' lapel buttons are appealing forcefully to the interest we have in people. Association with the right kind of people

for EYE-APPEAL

Candymakers know that half their packaging battle is won when they conceive an effect that stands out strongly on the candy counter. And the success of such an effect frequently hinges on the proper paper selection.



for PROTECTION



Coupled with the eye-catching value of every candy package must be protection, for protection preserves the goodness that tickles your customer's palate and makes him buy again. The wide variety of our lines offer you unlimited possibilities in the selection of the proper paper to combine sales appeal with product protection.

for ECONOMY

Although both eye-appeal and protection can easily be obtained if the cost is not important, packaging expense must be considered on most candy items. Here the Riegel Mills can be of valuable assistance. We have a great variety of standard papers for your selection—or we offer you extensive facilities for the development of special papers to meet any unusual problem in candy packaging.

Write for our portfolio of samples and working data on the many types of paper we can supply to confectionery manufacturers.

Riegel Papers

RIEGEL PAPER CORPORATION

342 MADISON AVENUE NEW YORK, N. Y.

is just as important commercially as socially. "No," said the famous Baron Rothschild to a friend who had asked his financial aid, "I won't put any money into your proposition. But I will walk with you arm-in-arm across the floor of the Exchange."

Candy Lends Itself to Spectacular Promotion

Candy people have been somewhat remiss in their use of personalities in life in their merchandising. Candy particularly lends itself to spectacular promotion since, unlike food or shelter, it is not bought in a particularly serious buying mood, and, therefore, the sky is the limit for merchandising ideas that might be a trifle undignified in selling other types of mer-

Names make news. That's an old adage-but it applies particularly to getting publicity. Photos of people—when interesting—will get even more publicity. Beechnut is doing a swell job with its costumed sample girls and also with its reproductions of circuses. Mounted on trailers, these glass-enclosed, mechanical shows pull crowds in every city.

Frankie and Sadie, the Baby Ruth midgets, are doing the same job for their sponsor in their auto tour of the South. The same principles of life and personality were behind the using of Miss Adair Adams as the Candy Queen at the NCA Convention in May.

Put people into every phase of your promotions. Living window displays sold marshmallows for drug chains in Washington. Boys from local high schools engaged in a marshmallow-eating contest.

Put life into your sales meetings. Surprise your men next time by bringing one of your customers to the meeting to talk to them; or one of your suppliers to tell about the materials that go into your product. One company runs its sales meeting in "March of Time" fashion. Thus they dramatize each idea in radio playlets form the way "Time" does on the air.

Tell your salesmen to put more personality into their own selling, to talk about people who are eating candy, talk about people who are manufacturing candy, talk about your customers and what they are doing to

One distributor called attention, skillfully, to bad sales methods by using a character known as I. Neversell. Neversell was a grouchy old gink who made every possible mistake in selling. One look at his sour mug and any salesman would want to be as different from him as possible. The "Voice of Experience" at sales meetings, mentioned before, is an application of the same principal in a positive vein. Both are personality. We avoid copying the one. We try to learn from the other.

Marc Connelly once laughingly wrote an epitaph for himself. It read:

Here lies the Body Marc Connelly Who?

The short-cut to fame—and an epitaph of which no one will say "Who?"-is to ask that question, "Who?" every time you plan an ad, a window-any other important step in your business.

Ask yourself: "Whom can I tie this up with?"

Send a self addressed stamped envelope for your copy of THE SHOWMANSHIP YARDSTICK—a 12-notch check list of showmanship elements. It's free.

TRADE MARKS

Registration

+ THE following list of trade-marks, published in the Patent Office Gazette for the past month, prior to registration, is reported to The Manufacturing Confectioner Publishing Co., by Mason, Fenwick & Lawrence, Patent and Trade-Mark Lawyers, Woodward Building, Washington, D. C.

Manufacturers and dealers in candies, confectionery and baking products who feel that they would be damaged by the registration of any of these marks are permitted by law to file, within thirty days after publication of the marks, a formal notice of opposition.

ICE CREAM PLACES, candy. Use claimed since Sept., 1928, Herbert Candy Co., Philadelphia, Pa.

MISTRESS MARY, candies including English toffee. Use claimed since Nov. 28, 1935, by Karl L. Rathje, Whea-

KRESTO and picture of child, malt chocolate mixture in powder form. Use claimed since Aug. 10, 1936, by Bestov Products, Inc., New York, N. Y.

Picture of girl and flowers, candies. Use claimed since July 24, 1936, by Frances Sinagnan Et Cie, Inc., New York, N. Y.

RUMBOS, candy. Use claimed since Aug. 26, 1936, by Beech-Nut Packing Co., Canajoharie, N. Y.

ARUNDEL, for ice cream. Use claimed since Dec. 1, 1920, by Arundel Ice Cream Co., Baltimore, Md.

KING O'NUTS, for nuts, shelled, salted, or in their natural state. Use claimed since Jan. 13, 1937, by Princess Pecans, Albany, Ga.

GOOD FELLER and picture of Bob Feller, candies and candy bars. Use claimed since Feb. 25, 1937, by Bob Feller Co., Cleveland, O.

ANCHORS AWAY, candy. Use claimed since Jan. 20, 1937, by Schutter Candy Co., Chicago, Ill.

MILCO-NOG, chocolate flavored malted milk powder. se claimed since Dec. 22, 1934, by Circle Foods, Inc., New York, N. Y.

TOSTY-ROSTY, popcorn in its natural state. Use claimed ince Sept. 1, 1925, Popcorn Growers & Distributors, Inc., Wall Lake, Iowa.

A and apple design, and word APPELLA, dehydrated fruit product consisting of apples puffed into small globules resembling popcorn. Use claimed since Nov. 27, 1936. The Issard Co., Seattle, Wash.

ICE CUBES, candy. Use claimed since Jan. 15, 1937, Schutter Candy Co., Chicago, Ill.

HOMESPUN and fireside scene, candy. Use claimed since Nov. 14, 1934, Abbott's Dairies, Inc., Philadelphia, Pa.

PATTIE-SUNDAE, frozen confections. Use claimed since June 24, 1936, Joe Lowe Corp., New York City.

CAREX, bread and cakes, etc. Use claimed since June 1, 1936, Nutritional Research Associates, Inc., South Whit-

AUNT JEMIMA and Aunt Jemima picture, candy. Use claimed since Jan. 14, 1937, The Quaker Oats Co., Chicago.

BO-BEEP and design, chocolate flavored malted milk powder. Use claimed since Dec. 26, 1935, by Circle Foods, Inc., New York, N. Y.

KINGCO, chocolate flavored milk powder. Use claimed since January, 1934, by Doral Food Products Co., Inc., New York City

NU-KORN, candy. Use claimed since Feb. 19, 1937, by New Foods, Inc., Chicago.
HONEY QUEENS, candies. Use claimed since Feb. 6, 1937, E. J. Brach & Sons, Chicago.
PEANUTEERS, candy and salted peanuts. Use claimed since April 6, 1937, Allen & Smith Co., Richmond, Va.



THE SENSATIONAL NEW CANDY BOX PADDING

GEORGE H. SWEETNAM, Inc. 282-286 PORTLAND ST.

1937 All-America Package Competition

The 1937 All-America Package Competition was opened on Aug. 15. The closing day is Dec. 18, 1937, and judging will take place immediately thereafter. More than 12,000 packages were submitted in last year's competition, and it is expected that the number of this year's entries will exceed that figure. Any package that has been marketed during the calendar year is eligible to compete without charge or fee. The five judges selected for this competition, which has been sponsored each year by Modern Packaging, are: Vaughn Flannery, vice-president in charge of design. Young & Rubicam; William M. Bristol, Jr., vice-president in charge of production, Bristol-Myers Co.; George R. Webber, of Standard Brands; Lita Bane, head of the Department of Home Economics, University of Illinois; and H. W. Brightman, vice-president of L. Bamberger & Co.

N.C.A. to Have Display Booths at Food Exposition

The Food and Better Housekeeping Exposition, to be held at the Coliseum in Chicago from October 9 to 17, 1937, is expected to draw an attendance of 40,000 people. Through the generosity of the Exposition management, a 24x6-ft. booth is being donated to the National Confectioners Association, and a further group of four booths, occupying a space 24x24 ft., to be designated as "Candyland," is being donated by the Exposition to members of the N.C.A. who contribute 40 boxes of their 5c candies for the booth, the money from the sale of these candies being collected and used by the Exposition to help defray expenses of the booth.

Candy manufacturers who take advantage of this offer regarding the "Candyland" booth are not prevented from displaying their goods also in the N.C.A. booth. Further details can be obtained from Max F. Burger, secretary, National Confectioners' Association, 224 S. Michigan Ave., Chicago, Ill.

Conference on Distribution

The Ninth Boston Conference on Distribution will be held at the Hotel Statler, Boston, Mass., on September 20 and 21, the theme of the conference being distribution costs, prices and manpower. E. C. Johnson, president of the H. A. Johnson Co., Boston, who is well known in the confectionery field, will preside at the session on the morning of September 21. The conference is sponsored by the Retail Trade Board of the Boston Chamber of Commerce, in cooperation with various schools and universities.

Du Pont to Build Cellophane Plant in Iowa

A plant for the production of "cellophane" film will be erected at Clinton, Iowa, by E. I. du Pont de Nemours & Co., and is expected to employ approximately 500 persons, a large majority of whom will be recruited locally. This plant will be the first "cellophane" production unit west of the Mississippi and will comprise about 20 acres under one roof. It is expected that a large power unit also will be installed. At present the only centers in which "cellophane" is being produced are Nashville, Tenn.; Richmond, Va.; and Buffalo, N. Y.

SALESMEN'S SLANTS

C. RAY FRANKLIN, Speaking from Cedar Rapids, Iowa



E VERYTHING points to a good crop throughout the Middle West for this fall. The wheat and oats are already made and in a good many places already har-vested, and the farmers will be through with the harvest everywhere within the next week or so. The yield whole was good throughout the country and the acreage was greater in such states as Missouri and Iowa than for many years. The corn looks fine with a few exceptions, and these are in Kansas and Nebraska in parts where the heat of the last few weeks has done some damage together with

lack of rain. Iowa and parts of Kansas and Nebraska and Missouri look fine. In the southern and western part of Iowa, where they have not had a crop for four or five years, the corn is fine. Gardens have been plentiful this year and the fruit and vegetables look fine and I am told the yield will be about average. In the Ozark section of Missouri and Arkansas the canneries are busy canning, where last year they were idle. This will all have a tendency to help bring in some extra money. With all this do not get too optimistic a view, however, as most of the farmers owe money for transfer a view, however, as most of the farmers owe money for seed, etc., contracted last year and a good portion of their income this year will go to paying up their back obligations. However, this money will be put in circulation and will render a valuable service to those parts of the country from whom the farmer has borrowed and will give him some extra money which we hope will be helpful to the merchants, jobbers and manufacturers in the Middle West, and some portion go toward existing their sweet tooth. satisfying their sweet tooth.

E. C. Gould of The Gardner-Gould Co., Burlington, Iowa, one of the oldest manufacturing confectionery firms in the Middle West, passed away at Burlington, after a short illness, a few days before this was written. Mr. Gould was born in Painesville, Ohio, in 1859 and came to Burlington with his parents in 1865, where he lived until his death. Mr. Gould was interested in everything in a civic way in Burlington. He was a member of the Chamber of Commerce and Masonic orders and was the chairman for many years of the City Beautiful Campaign, his principal hobby, and to this he devoted much of his time and energy. Mr. Gould is survived by a daughter and a sister. He was a personal friend of mine and it is only from lack of space that I do not quote an editorial in the Burlington purpose that is one of the finest complication. I have lington newspaper that is one of the finest compliments I have ever read. The industry, the country, his community and his friends have suffered an irretrievable loss.

The Duerson Candy Co., Chanute, Kan., has discontinued business. They sold their stock, good will and business to The Joe Smith Tobacco Co., Pittsburg, Kan. I understand that Mr. and Mrs. Duerson are touring California in the continuous control of the continuous control of the control of th fornia, enjoying a trip which they long had put off because of their close application to the business.

Mother: "Stop reaching across the table, Willie. Haven't you a tongue?" Willie: "Yes'm, but my arm is longer." This came from Ray Graham, candy buyer, for Paxton & Gallagher Co., Omaha, Nebr.

Aleck Abrahamson, sales manager for Sweets Co. of America, New York, was a visitor in Kansas City a few days ago and, believe me, the jobbers there were told about Tootsie Rolls from first to last. Aleck eats and sleeps them.

A lecturer says that books on etiquette have solved the social problems of the average American. Yes, but Harold Jacobson of The Northwestern Candy Co., Des Moines, Iowa, still doesn't know what to do when his mouth its full of bet some and he has to exact the solution of the solution. is full of hot soup and he has to sneeze.

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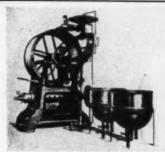
CHICAGO, U. S. A.

Mr. Bert Rubin, president of Sweets Company of America, New York, sent me the following one a few days ago: "Anne Mae," said the mistress of the house, finally giving Anne Mae," said the mistress of the house, finally giving away to curiosity, "I notice you have been taking our grapefruit hulls home with you. What do you do with them?" The negro maid looked up at her mistress with a sheepish grin. "Yes'um," she admitted, "I'se been carrying 'em home. I'se think they make my garbage look so stylish!"

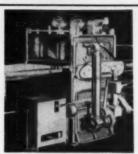
The following came to me from a fellow who said he got it from Bob Keppel of Lancaster, Pa., so don't blame me; I am only telling you what I was told, so there! "See that girl up in the stands?" "Well, what about her?" "Well, she's fresh from the country and it's up to us to show her the difference between right and wrong." "O. K., pal, you teach her what's right!"

BE PREPARED for FALL BUSINESS

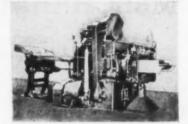
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4-300 gal. Gum Kettles with double acting mixers.
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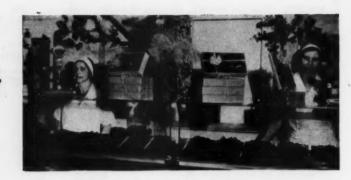
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Sweetest Day

SENTIMENT for "Candy Week" and "Sweetest Day" is being aroused in various sections of the country by confectionery manufacturers and by the jobbing, wholesale and retail trade. Candy Week begins this year on October 10 and ends on October 16, which has been designated Sweetest Day.

The National Confectioners' Association has sent to its members a bulletin suggesting various ways of promoting Candy Week and Sweetest Day, including preliminary organization to carry on the promotion work, and suggested publicity.

The Association, through the office of its secretary, Max F. Burger, offers a typical form for a proclamation by the mayor, four brief articles that can be used as editorial or radio talks, one prepared radio talk, and an article for the women's page in the local newspaper.

In addition to publicity in local newspapers, the Association bulletin also suggests securing the cooperation of the retailers in the use of window posters, counter and window displays, package inserts, etc., and radio broadcasts over local stations.

The Southern Wholesale Confectioners Association, Inc., Atlanta, Ga., are using their bulletins to publicize Candy Week and Sweetest Day, and are offering their assistance to communities desiring to take advantage of this opportunity to increase candy sales, reports C. M. McMillan, association secretary.

Several cities have already started preparations for proper observance of Candy Week and Sweetest Day. A Sweetest Day Committee is at work in Cleveland. At a recent well-attended meeting, Harry D. Sims, of Chandler & Rudd Co., was elected chairman of the Committee, succeeding James F. Mulcahy, of the Fred Harvey Co., who continues as a member of the Executive Committee. W. M. Hinson, candy broker, continues as secretary of the Committee and H. M. Hoffman, of the Adam Hoffman Co., was elected treasurer.

Signs, placards, advertising and a publicity program for Sweetest Day were approved by the Cleveland

committee. In addition, the committee is cooperating with the program of Associated Candies, Inc., to have Sweetest Day observed in every Ohio trading area, and a complete plan of action is available to any who will communicate with W. M. Hinson of James F. Mulcahy, 688 Union Trust Building, Cleveland.

A survey of the 1936 Sweetest Day sales in Cleveland showed that business was 18% ahead of the 1936 Christmas time sales. So the committee has the proof down in black and white, that organized promotion of Sweetest Day pays big dividends to manufacturers, jobbers, wholesalers and retailers.

In Cincinnati, the Sweetest Day program is being conducted entirely through the various retail organizations, says E. Fleckenstein, of The Dow Drug Co. Plans call for newspaper advertising and window and store posters to be used throughout Candy Week.

Buffalo confectioners will observe Sweetest Day. Theodore H. Merkens, of Merkens Chocolate Co., Inc., Buffalo, says that the local confectioners will hold a meeting soon at which plans will be made.

Traveling Candy Kitchen

H. J. Pinter, known as "The Candy Man," operates his own candy factory on wheels, in Stockton, Calif. "The kitchen of this factory is as complete as any retail candy kitchen in the United States," says Mr. Pinter. During a recent torrid spell, Mr. Pinter created wide comment by hanging out this sign:

"Closed in Respect to Your Intelligence as I Am Not Dumb Enough to Think You Are So Stupid to Eat Candy These Hot Days. Drink Beer. The Candy Man."

In commenting on this novel sign, A. L. Banks, a Stockton newspaper columnist, reported, "But a lot of people do not drink beer. They eat candy, regardless of the weather; and they miss the particularly good candy 'The Candy Man' makes and sells at his truck parlor."



Traveling candy kitchen operated by H. J.
Pinter, of Stockton, Calif., who makes a wide
variety of candles in this portable factory
and sells them right from the truck.

